

AN INVESTIGATION INTO THE VISUAL LITERACY SKILLS
OF BLACK PRIMARY-SCHOOL CHILDREN
FROM AN INFORMAL SETTLEMENT IN CAPE TOWN,
WITH PARTICULAR REFERENCE TO VISUAL IMAGERY
IN EDUCATIONAL TEXTBOOKS

THESIS

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ABSTRACT

This thesis provides evidence that learning difficulties some black primary-school children may experience with certain textbooks, can be attributed, in part, to the visual text (imagery). These difficulties were established by eliciting responses from educationally disadvantaged urban black primary learners to selected examples of visual texts using the Research Interview method. To further establish if these difficulties were attributable either to poorly executed/unrecognizable visual text, or to low levels of learned educational visual literacy skills - white primary-school children were also interviewed - as it was anticipated that they would be familiar with Western pictorial material due to their consistent exposure to books from an early age. The difficulties experienced by the black interviewees were attributed mainly to their level of learned pictorial perceptual skills and to a lesser extent to poorly/inadequately illustrated visual texts.

It was found from interviews with the developers of visual texts - publishing personnel and illustrators - that the former were not entirely certain exactly which aspects of visual text were difficult for black primary learners to comprehend, while the latter were generally very uncertain. The procedure for visual text development by the developers (including textbook authors), was found to be problematic due to the lack of synthesis and consultative decision making in the process between these persons. The limited time allocated to illustrators for producing visual text, as well as their professional isolation, were found to be factors which can give rise to ineffective and inadequate visual texts.

Most publishers and authors, if they trial (field-test) materials, generally do not trial the visual text. The visual text is usually decided upon ultimately by the publishers and produced after trialling and/or consultants have examined the written text. Consequently incongruent meanings and inconsistencies can result between written and visual text, which can affect the learning effectiveness of the composite text. Trialling (field-testing) of visual and written text together, was recommended to identify and address any difficulties experienced by learners prior to final publication of the textbook. Recommendations were provided for textbook selection committees, authors, teachers, publishers and illustrators.

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Introduction

"Kids are failing like flies out there, and we're not giving them an effective education. We're heading for a disastrous future."

Nic Taylor, Educationist (James, 1991:6)

Black primary-school children are the largest learner group in the country and have the highest failure rates overall. (See Appendix 1.) One of the many causative factors for these high failure rates is that educational textbooks are considered, in certain instances, to be ineffective and inappropriate for the learning needs and skills of black primary learners; " ... the irrefutable facts are that for a significant segment of South Africa's pupils and teachers, textbooks instead of being the means of lifting them out of the morass of their disadvantage, are actually a burden, pushing them deeper into their impotence." (Blacquière, 1995b:2.) Findings by the National Educational Policy Investigation (NEPI) advised that there was a need to improve the quality and availability of books and teaching materials which had been suitably adapted for a new South African curriculum. (NEPI Report, SAIRR, 1995:694.)

As textbooks are sometimes the only, or one of very few, books that many educationally disadvantaged black primary-school children are consistently exposed to (Third Alternative, 1990), effective and optimal comprehension by the child, of both the written text and visual imagery (text) - assumes a critical role in their learning process. The function of visual text in educational textbooks is primarily to communicate information, explain, re-inforce, complement and supplement the written text, and thereby provide meaning to the child for learning. Where visual text is autonomous, it should likewise clearly illustrate its intended meaning/s.

Research into the learning efficacy of written text in textbooks has revealed that black children often experience difficulty understanding the accompanying visual text. (Langhan, 1990:223; Blacquière, 1995a:84.) The inter-relationship of written text with confusing, incomprehensible or irrelevant visual text, can make the effective comprehension of written text, and the dual communication process, difficult and confusing - if not sometimes ignored altogether by the learner. (Blacquière in Benjamin, 1989:18; Blacquière, 1995a:85.)

There has been comparatively little available (published and unpublished) empirical research conducted in South Africa into black primary-school children's pictorial perceptual skills interpreting examples of visual material in primary-school textbooks (specifically), in comparison with that conducted into their comprehension of written text. Given that visual text in textbooks is often allocated, on average, half, or more, of the page space of the entire textbook, excluding the cover, it has considerable impact, both in terms of its aesthetic visual appeal, and, more importantly, its effectiveness, or ineffectiveness, in providing meaningful learning for the learner.

Duncan et al. (1973) tested the responses of two hundred white, four hundred rural black (Tsonga and Zulu) and four hundred urban black (Tsonga and Zulu) primary-school children between the ages of eight to thirteen years old, to ten Western pictorial conventions and five art styles. The majority of illustrations used in their study were drawn specifically for that research, and were not selected from educational textbooks. They found that the black rural group had the lowest levels of pictorial perceptual skill, the black urban group had higher levels than the rural group, and the white group had the highest levels of Western pictorial perceptual skill. They attributed this to the white group's considerable exposure to pictures in books and visual media, and to the black group's comparatively little exposure to the same. As this research was conducted in the late 1960s, and due to the increased exposure of black urban children to western culture and visual imagery through media such as television, advertising and popular magazines, the relevance of their findings for the development of visual text today remains to be established. Benjamin (1989) recorded the responses of six urban black (Xhosa speaking) primary-school children (seven to eight years old) to seventeen line drawings, comprising nine pictorial conventions and two art styles, from a textbook developed by a national educational materials development project.

Research into the pictorial perceptual skills of children in Africa and elsewhere internationally has been extensive, however these findings though helpful and referred to in this research, arise out of systems which are not necessarily germane to the South Africa context. Local problems need to be identified and solutions need to be sought within a national context.

The recognition that the child's understanding of visual text is important for their understanding of the composite (written and visual) text, emphasises the need to examine visual text with a great deal more attention than has been accorded it in the past, certainly in comparison to that of written text. An examination of visual text should not be approached as a dichotomic and taxonomic dissection of visual syntax, conducted in isolation from its users and creators; but by virtue of its intended role as a communicative learning medium must include those who are responsible for creating and developing the visual images and importantly, the users - in this instance, black south African primary-school children.

Aims of this study

The rationale behind the present study was therefore to provide information which could assist toward improving the visual component of educational text books for black primary-school children.

The primary objective was to establish which aspects of visual texts in educational materials urban black primary-school children from disadvantaged backgrounds experience difficulty understanding and interpreting. To do so the following method was used: Approximately two hundred and eighty examples of visual text, were shown to ten black (Xhosa speaking) primary-school children - from an informal settlement in the southern suburbs of Cape Town, who attended local English medium suburban schools

- and ten white (English speaking) primary-school children living in the southern suburbs of Cape Town, who also attended local English medium schools. Responses were elicited from the two groups of interviewees using the Research Interview method. The examples of visual text were selected from textbooks printed (or revised and/or reprinted) between 1991 and 1996, the majority of which were primary-school textbooks intended for black learners and/or learners across the racial spectrum. Twenty different pictorial and symbolic conventions, ten illustrative styles and approximately two hundred pictorial items to determine the interviewee's familiarity with different subject matter, were incorporated into the investigation.

The secondary objective was to establish firstly, whether publishing personnel and illustrators knew which aspects in visual texts were problematic for black primary-school children to understand, and secondly, to evaluate the procedures used by them for the development of visual text. To this end, five interviews were conducted with six senior editorial publishing personnel from five different publishing companies, and three illustrators who were regularly commissioned by one or more of these publishers. A postal Research Questionnaire was also sent to various publishing personnel, to which four responded.

In terms of the findings from these two objectives, the final objective was to make recommendations for the improvement of visual texts in educational textbooks and the process of visual text development, which would affect educators and textbook selection committees, publishers, illustrators, teachers and authors.

Chapter One

Visual Literacy

Literacy and illiteracy

Literacy denotes one of the basic aims of education, namely, the ability to read, write and speak a language at a specified level of proficiency. (du Plooy, 1989:11.) Dondis defines literacy as a group sharing the assigned meaning of a common body of information. (1973:182.) Illiteracy then, is the converse of literacy and means, to be unable to speak, read and write a given language, therefore to be unable to encode and decode the assigned meaning of a given linguistic and written code.

Literacy is a relatively recent human invention and an even more recent accomplishment. (Dissanayake, 1992:3.) In the wide ranging debate around literacy, there is consensus over the importance of literacy to both the individual and the nation, but there is descensus in virtually every other dimension of literacy, including: the definition of literacy, how to measure it, why it is important and how it should be taught. (Taylor, 1989:7.) However, the eradication of illiteracy is the single biggest factor facing educators in South Africa (British Petroleum in South Africa, 1990:42.) Illiteracy is a significant feature of the poverty cycle, particularly in a developing country like South Africa. The lack of adequate educational provision for South Africa's underprivileged communities has been one of the major contributors of illiteracy. "Literacy can and has been employed for social and political control to advance one culture and marginalise another." (Graaf, 1987:70.)

The acquisition of literacy is unlike the acquisition of language. The ability to speak a language is an universal phenomenon which evolves naturally from birth and is essential for communication. Linguistic research by Noam Chomsky (in Dondis, 1973:8) explains that the deep structure of language is biologically innate, whereas being able to read and write a language, is a skill which is acquired through a determined process, that of learning. Similarly the term, visual literacy, implies that although the act of seeing is an universal phenomenon, the ability to understand the assigned meaning of a particular cultural visual syntax, or picture, is a skill which has to be learnt.

Visual literacy

In her monograph, entitled, 'Understanding Television: Guidelines for Visual Literacy', du Plooy writes that:

" ... the concept, visual literacy, ... originated eclectically from a diversity of theoretical approaches in such disciplines as philosophy, linguistics, semiology, structuralism, art, psychology, education and anthropology. The term itself was first used by an American, John L Debes, in 1969, in reference to the use of pictures and photography as educational aids by teachers, librarians and media experts. His enthusiasm for the use of visual aids in education led to the first National Conference on Visual Literacy in 1969." (1989:11.)

The delegates at this conference defined visual literacy as follows:

Visual literacy refers to a group of vision competencies a human being can develop by seeing and at the same time having and interpreting other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed they enable a visually literate person to discriminate and interpret the visual actions, objects, and symbols, natural or man-made, that he encounters in his environment. Through the creative and appreciative use of these competencies, communicated with others, he is able to comprehend and enjoy the masterworks of visual communications. (Fransecky and Debes, 1972:7.)

Visual literacy has also been defined variously as:

An ability to become "mentally skilled" (Winn, 1982:4) in the use, creation, manipulation and interpretation of imagery. (du Plooy, 1989:11.)

The development of skills in the use of verbal communication tools and a critical sensibility towards visual communication. (Elwell and Hess, 1979:28 in du Plooy, 1989:11.)

The ability to understand, analyze, synthesize and see relationships in visual communication. (Gosher, 1991:32.)

The ability to " ... 'read' visual language with skill." (Fransecky and Debes, 1972:9.)

The translation from visual language to written language. (Fransecky and Debes, 1972:9.)

An agreed upon system from which a basis for learning, recognizing, making and understanding visual messages can be constructed, negotiable by all people, not just those specially trained, like the designer, the artist, the craftsman, and the aesthetician. (Dondis, 1973:x.)

At the most fundamental level it is almost impossible for a sighted individual to be visually illiterate. Each individual within their own socio-cultural, learning and working environment acquires different types and levels of visual skill and intelligence necessary to survive, function and interact effectively within those environments.

" In the same way that a peasant woman might be mathematically illiterate but still be able to cut and sew a complicated geometrical dress pattern, or the street newspaper vendor who cannot pass Std 2 maths can easily give a motorist change ... or individuals distinguish natural images like the markings on the skins of cattle or patterns in beadwork or woven material ... people acquire a basic visual competence." (Van Zyl, 1991:57,59.)

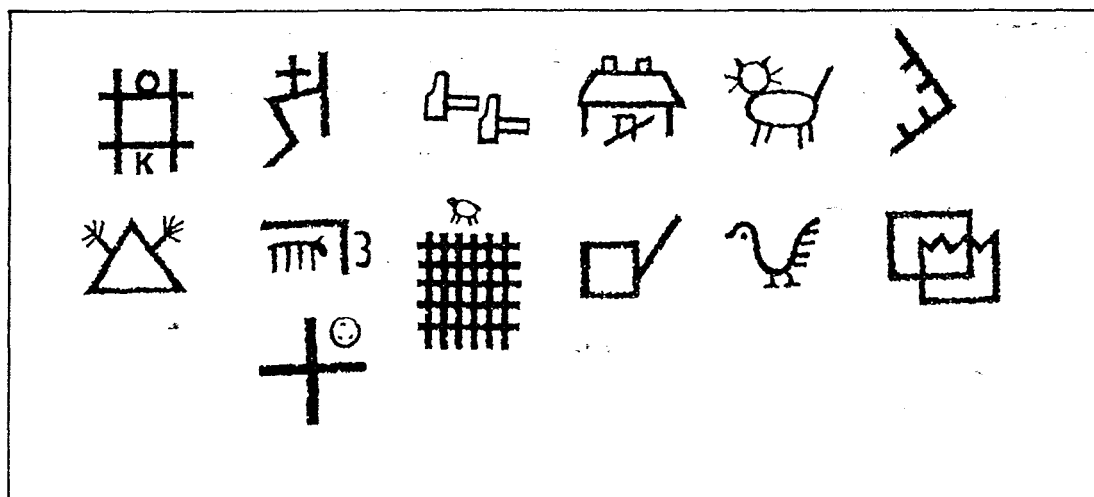
Often the perceived 'lack' in an individual's visual fluency and vocabulary arises when they find themselves in an unfamiliar environment, usually that of a different culture, sub-culture or learning situation, with which they may have had little or no previous sustained exposure or experience. They have not acquired those skills necessary to encode and decode a particular cultural code - although they may be particularly skilled in and knowledgeable of their own cultural codes.

"The successful interpretation of pictures and indeed the whole crux of visual literacy itself is dependent on all users sharing an agreed upon code, a code being the system into which signs are organised. All codes including pictorial codes, rely on agreement amongst their users on their basics: the units they contain, the rules by which these units may be selected and combined, the meanings open to the receiver, and the social or communicative function they perform. Such agreement is usually reached by convention (culture). Inevitably, the final concern of visual literacy is whole form, the cumulative effect of the combination of selected elements, the manipulation of the basic units through techniques and their formal compositional relationship to intended meaning." (Dondis: 1973, xi.)

"People do not get information from the things they see, even though they may be looking at the same things. For the meaning of any language, visual or verbal, is not in words, letters, lines, colours or spaces. Rather it is in us. We have learnt to attach meaning to these symbols." (Zimmer and Zimmer, 1978:20.)

By way of an example, if an individual was confronted with the following two visual codes¹ they may perhaps not be familiar with them.

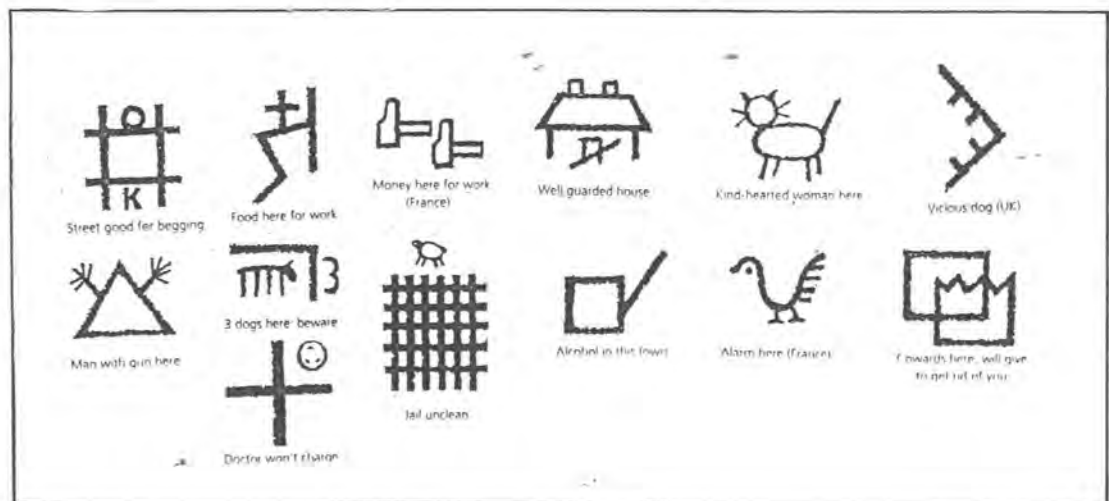
Code 1



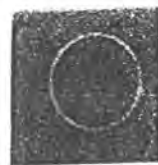
Code 2



If they were unable to recognize and interpret the meaning or messages in the first code, it is unlikely that they have ever been a 'knight of the road' or 'milestone inspector' (tramp/bergie/hobo) in France, England or North America for the past 50 years². If the second code was somewhat foreign or unfamiliar to the individual, it is probably because they are unfamiliar with the sign language developed by researchers for communication with Bonobo apes. Their visual literacy skills necessary to interpret some of the symbols from these two codes were probably negligible, however their inherent perceptual ability to learn either of these codes is not in question. The meanings for the first code, and some of those from the second code are provided below.



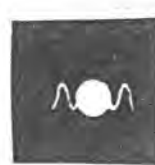
Yes



Hello



Tickle



Food



Question



Light

There are as many 'visual literacies', competencies and intelligences, in as much as there are as many cultures, sub-cultures and as many different systems of making and receiving visual messages. To be visually literate within one's socio-cultural and educational environment is desirable as it enables an individual to learn, interpret, communicate and negotiate visual information effectively, thereby empowering individuals, especially in societies where visual messages and visual media proliferate as technology becomes increasingly sophisticated.

Visual literacy as art education and appreciation

A commonly understood and widely used definition for visual literacy - in the Western cultural idiom - is that of a relatively sophisticated fluency in making, understanding, appreciating and critically evaluating visual media.

Art and music as curriculum subjects, are fast becoming the Cinderellas of the South African educational script, as "... for many years, schools have concentrated on the verbal skills. The skills of visual literacy, though not recognized by this name, have traditionally been set aside as extras or reserved for those with talent." (du Plooy, 1989:11.) The high esteem accorded verbal and written skills by educators, has meant that the advantages of developing children's visual literacy and visual communication skills have been minimized, especially after the early grades - and children are, in a sense, "weaned away" from pictures and illustrations; and also from drawing and illustrating their own work. (Ibid.,:11.)

Dondis's entire treatise on visual literacy (1973) inspires the belief that a learned level of visual sophistication needs to be attained to compose, understand, analyse, appreciate and negotiate the different forms of visual imagery in a western cultural idiom³. Dondis is a strong proponent of the visual nature and character of learning, and contends for the inclusion of art as a subject, and visual thinking as an approach to learning, into syllabi and curricula.

In this regard, the intentions of teaching visual literacy are to:

- Develop students' nonlinear thinking abilities and to broaden their language experience beyond the basic ones of reading and writing . (du Plooy, 1989:27.)
- "... make children so aware of their surroundings that they go on looking when they grow up. Developing visual sensitivity ... [which] is important for producing artistically educated and aware adults who actually care what the things around them look like." (Barnes, 1987:13.)
- Enable children to respond to visual imagery in media which will enable them to form a basis for aesthetic and ideological scrutiny. (Fransecky and Debes, 1972:9.)
- Enrich perception and extend ability to communicate. (Barry Ronge in Ranby, 1993: Intro.)

- Promote active and participatory learning; develop skill and confidence; Provide access to information; Demystify knowledge; Encourage independent and critical thinking. (Gosher, 1991:32.)
- Ultimately use visual literacy as a contribution to the overall education of each student in developing a personal and social competence. (du Plooy, 1989:3.)

With this in mind, children would be involved in visual literacy and media projects, subjects and activities such as film study (cine-literacy); understanding advertising imagery (Ranby, 1995); understanding tele-visual imagery and cultural ideology (du Plooy, 1989); using a camera (Fransecky and Debes, 1972); analysing photography, paintings, sculpture and graphics.

Children should be afforded every opportunity to acquire a sophisticated knowledge of visual media which would enable them to analyse and negotiate media imagery and statements - as well as compose and communicate their own visual statements. This research, however, focuses on many black primary-school children who may not have experienced sustained exposure to a variety of visual media and books, yet need to understand and interpret visual imagery in educational textbooks, in order to learn effectively and meaningfully.

As the term, 'visual literacy', encompasses many aspects of visual competence and skill in many different contexts, it was decided that for the purposes of this research, the term 'educational visual literacy' would be adopted to provide a distinction between the general meaning of the term, visual literacy, and that of its application in the formal learning context - to define the perceptual skills which children need to interpret visual imagery in educational materials.

The acquisition of an educational visual literacy

Although the ambient imagery and visual nuances of a culture are often passively absorbed by children through sustained exposure to these influences in their environment; this offers no guarantee that a particular visual code or perceptual skill has been learnt, as "... the amount one can learn by unmediated sensory perception is limited and we have to rely upon learning through information. " (Pit-Corder, 1973: x.) If a child is consistently exposed to and taught to attend to a particular visual medium, either by their parents, their social environment, their recreation or through education, the child will, undoubtedly, attain a level of proficiency in successfully interpreting that code, e.g., learning to recognise the distinctive markings on cattle, playing computer games or learning to 'read' pictures and images in books. Dondis maintains that, " ... making and understanding visual messages is natural to a point, but effectiveness on either level can only be achieved through study." (1973:10.) Gross also maintains that:

"The existence of competence is dependent on extensive and continual action it is the only way such knowledge can be acquired, maintained, extended and utilised Intelligence is skill in a medium, or more precisely skill in a cultural medium." (1974:76.)

After an intensive investigation into a number of research findings, Roos (1977) hypothesized that:

"... since the complex components of perception, visual perception and form perception are largely acquired, it should be possible, given certain predictable developmental changes, to teach the necessary skills in an intentional and structured manner." (in Blacqui re, 1988:61.)

The importance of visual literacy

"Pupils need to be competent in using and understanding the uses of the dominant communication media of their own culture. Our age demands an all-media literacy which enables understanding and assessing messages in the media of what is tending to become a post-literate world." (Gosher, 1991:32.)

Van Zyl (1991:56) states that,

"Since visual competence is not taught at school, even a child's ability to see - their natural visual and perceptual acuity - is subordinated to the word. Gradually visual images are relegated to illustrations and written texts, while all the attention is focused on explication and criticism of the written text. It might be argued, therefore, that there is no such thing as visual illiteracy, and even if there were, it would not be as serious as linguistic illiteracy."

Du Plooy (1989:1), however, argues that a lack of visual literacy results in the naive use and interpretation of visual messages, which must affect communicator and viewer alike - and quotes a statement by Frank Ogden, the Canadian futurist, which reads, "... [visual] information has become a weapon and if one is not aware one could walk in with bows and arrows while the opposition is using laser beams."

Sutherland (1991:51) proposes that, "[t]he pupils we are teaching will be adults in the 21st century ... surely what education should aim for is the development of aptitudes and abilities for life ... [as] ... [t]he visual medium has become the most powerful influencing force outside of schools" In the search for meaningful and relevant education in South Africa, this is especially important for children whose levels of visual literacy skill are low, and yet will be absorbed into a rapidly burgeoning urbanised and technologized process. Not to give critical attention to this important aspect of the educational process and to, "... consider the word predominant in an increasingly visual culture, is to be in the position of those tenacious, aggrieved spirits who continue to envision the already circumnavigated world as a flat table." (Fransecky and Debes, 1972:7.)

In examining the visual literacy of black South African primary-school children with reference to educational materials, it is necessary to view the children concerned within the context of their educational, socio-economic and cultural environments. The research should not be "addressed in a vacuum' which fails to illustrate the relationship of ... [the problem] to the structure of society." (Cohen and Manion, 1989:59-60.) It should also "... focus on the social and cultural contexts and processes involved in the acquisition of visual literacy" as, "... it is a social issue defined by social context." (van Zyl, 1991:57-8.)

Factors Affecting Black Primary School Children's Educational Visual Literacy

Brief historical overview of black educational provision - 1800s-1990s

Formal classroom education was introduced to southern Africa by white European settlers from Holland and Britain, who settled in the sub-continent during the seventeenth⁴ to early nineteenth centuries⁵. During the eighteenth century " ... at the seaport (Cape Town), several primary-schools were established ... attended in all cases by the children of the white settlers and their slaves." (Davenport, 1977:23.) By 1917, the government legislated that, " ... schooling had become compulsory for all white children aged seven to fifteen, who lived within three miles of a school." (Short, 1985:41.) The majority of schools for African and coloured children were established and run by missions and churches, who depended increasingly on the state for financial aid. (Malherbe, 1977:540-1,558.) Education for black learners developed slowly and with difficulty, as it did not receive the same official financial provision as that for white education. "The cash nexus inevitably involved control; and the nature of the control vitally affected the nature and spirit of the educative process." (Malherbe, 1977:536.)

In 1948, the National Party came to political power and instituted a massive change in educational policy. Based on the wellknown tenets of apartheid ideology and the separate development of racial groups⁶, eleven new educational authorities were created for the different ethnic groups of South Africa. (Short, 1985:39.) The Bantu Education Act No. 47 of 1953 enabled the Department of Native Affairs to officially impose on black learners, a system of education inferior to that of their white counterparts and thereby effectively bar black children from a bona fide education⁷. (Malherbe, 1977:545-8; Short, 1985:39-40; Schadeberg, 1990:80.) The Nationalist government also began to wrest control of schools from the churches and by 1958 all state subsidies to church schools had been withdrawn and the majority were placed under government control or closed for financial reasons. (Malherbe, 1977:550; Short, 1985:39-40.)

Each educational authority (ministry or department) controlled its own syllabi, examining body, teacher training departments, school inspectorate, employment of teachers, curricula and selection of prescribed textbooks. Almost all the senior decision-making personnel and the inspectorates in the major departments were white except in the case of the newly established homelands. Simply said, it became possible to speak of black education, coloured education, Indian education and white education as distinct from one another. (Short, 1985:40.)

During the 1970's to 1980's, large publishing companies owned and run by white Afrikaner nationalist South Africans had almost exclusive (and lucrative) contracts to supply textbooks to the Department of Education and Training (DET)⁸. (Phillips and Cantey, 1995:417-9.) Cantey alleges (Personal Communication^a, 1996) that a great percentage of officially prescribed textbooks for DET schools, were,

^a Henceforth 'Pers. Comm.'

in the main, written, designed, illustrated and published by white South Africans. Many of these learning materials were not suited to the bona fide educational development, needs and aspirations of black learners.

Luthuli wrote in 1985 that, "Polarisation has resulted in the failure of the policy makers to provide for relevant Black education. Black education today is a failure in that it is alien in approach or based on white perspectives rather than addressing itself to critical research of the actual conditions in which black people live." (1985:8.)

Since 1994, when official democratic political change took place in South Africa⁹, post-apartheid education will have to contend with a complex array of problems to achieve their democratic educational policy aims of an equal education for all South African pupils¹⁰. The disparities which exist between the different racial groups in terms of knowledge, training and access to educational resources, have had negative implications, not only for those learners who experience a deficiency in this regard, but also for the success of an entire education system. James wrote in 1991, that, education experts estimate it could take South Africa "... up to 25 years to transform its education system into one that can be practically implemented and acceptable to the majority." (1991:4.)

Formal learning environment

Black primary-school children are the largest group of learners in South Africa. (See Appendix 1) Consistently high failure rates for this group indicate that they are not receiving an effective education. (See Appendix 1) If the crucial foundations necessary for the development of learning skills are not adequately laid in primary-school, " ... there will be a mismatch between pupils' competence and the demands of the educational system." (Langhan, 1990:2.) Therefore, " what children see, hear, [learn] and read during the most formative years of their lives has great consequences for their future and the future of the society in which they live." (Solomon, 1991:280.)

Many factors in the formal learning and socio-cultural environments of black primary-school children contribute to their ineffective education. (See Appendix 1.) One of these factors is that of inadequate learning resources (SAIRR, 1995:702), and more specifically the availability and quality of educational textbooks - many of which are not designed and appropriate for the learning needs of a great percentage of black primary-school learners. (Blacquièrè, 1995b:2.)

For many learners in third world countries, the textbook constitutes a key element of their educational experience, as it is " ... sometimes the only reading material used by the student" (Altbach and Gopanithan, 1988:45.) Although the Department of Education and Training (DET) stated that they would spend an estimated R 135 million on textbooks in 1995, there is still a shortage of textbooks in black schools. (SAIRR, 1995:704.)

Furthermore, South Africans as a whole, do not purchase many books - of all the books sold in this country, 80% are textbooks. (Blacqui re, 1995b:1.) In South Africa, research statistics from the Third Alternative¹¹ state that 30% of black school children claim that there are no books or reading material at home. (See Chapter Four.) A shortage of community libraries and library services exists in many of the traditionally 'black' urban areas. (Woolfrey and Omar, 1993:15.) Where there are libraries in black schools (supplied by the respective provincial education departments), there is often a shortage of books¹². Several educational organisations and projects provide valuable supplementary library services, e.g., READ¹³, but are limited by the extent of their resources and funding.

Socio-cultural environment

The intellectual and educational development of the child occurs in a physical, social and cultural environment; it is inseparable from this context. (Ohuche and Otaala, 1981:46.) The child's socio-cultural environment has a concerted influence on the child's formal learning development. A considerable amount of learning occurs spontaneously outside the school, as the child learns skills, world views and values, which reflect their cultural experience and access to the mature members of their society who already practice specific areas of knowledge. As Wood suggests, it " ... is one of the most reliable predictors of a child's likely performance in school." To the extent that the required skills and values of the home and school coincide, children are likely to fare well. (Wood, 1988:15,25,112-3.)

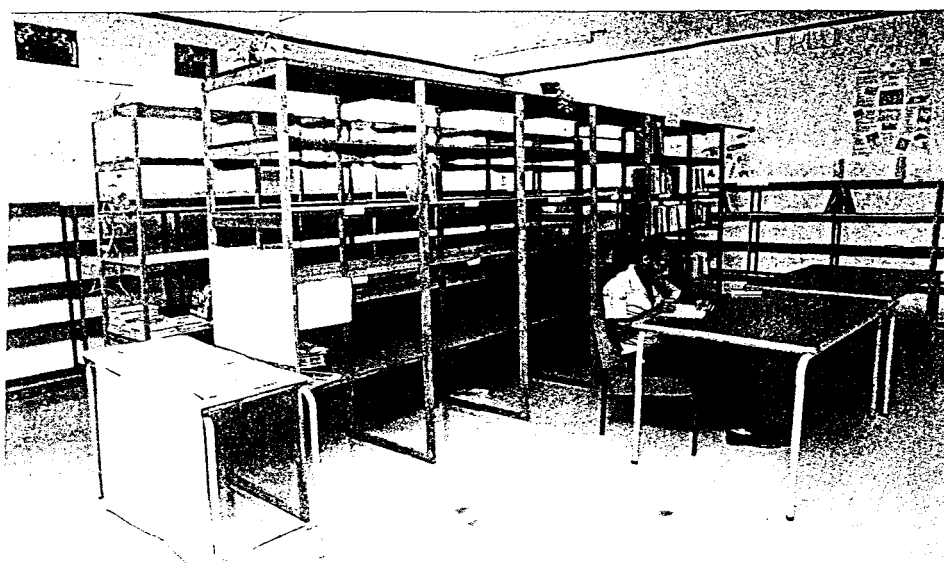
According to the Development Bank of South Africa (DBSA), in 1993, 46% of the African population was illiterate while the National Literacy Co-operation (NLC)¹⁴ estimates this figure to be 50% - approximately 15 million South Africans (excluding the independent homelands) are illiterate. (SAIRR, 1993:614; 1995:724.) Implicitly, many parents of black primary-school learners are illiterate or poorly educated. Children of illiterate or poorly educated parents are likely to be at a disadvantage in " ... academically oriented schools because of inadequate educational back-up in the home." (Short, 1985:35.)

Due to existing socio-economic realities in South Africa (see Appendix 1), in a 'worst case scenario', it is unlikely that those children whose parents are illiterate - and/or for whom economic survival is a pressing concern - will experience, or have access and exposure to, a sustaining culture of literacy and learning within their home environment¹⁵.

A fair percentage of black primary-school children will therefore experience a predominantly oral mode of communication in their home environment. Traditionally indigenous South African groups have a rich oral heritage, but do not have a traditional heritage of writing and literature. Black children traditionally learned their history and cultural traditions via the oral tradition, e.g., the Xhosa, who carefully preserved their literature in their minds and memories through myths, legends, tales about people and animals, proverbs, songs, lyrics and praise poems. Every tribe had its own fables for the instruction and amusement of its children as well as for the explanation of natural and mythical phenomena. (Pinnock,

1994:76.) Western European culture, on the other hand, exhibits a long and weighty tradition of writing and literature. Western children are exposed to this 'written' tradition as they are read to, generally have access to books and are encouraged to read by their parents or adults from a young age. Children from either an illiterate or poorly educated predominantly oral socio-cultural environment, may not experience the same process. Their exposure to books may either be negligible, inconsistent and/or limited to those reading materials available to them in their schools.

Given these factors a large percentage of disadvantaged black primary-school children find themselves having to depend almost entirely on those educational materials prescribed and available to them within the formal learning environment. Therefore the educational quality, effectiveness and availability of these materials assumes a critical role in their learning process.



* The library is ambitiously decorated with educational posters encouraging students to read, but there are not enough books for a class of 40 students, let alone the school population of 1 300.* (Robertson, 1995:98-9.) * It is my wish that every child in this country has access to books ... everything possible must be done to encourage reading in our schools and homes * (President Nelson Mandela, Readathon Message, September 1995)

An important component of educational textbooks is the pictorial material or visual text¹⁶, which is designed, primarily, to support the intended meaning of the written text. From observation it was noted that visual material, in approximately one hundred and fifty South African published primary-school textbooks and storybooks, published or revised and reprinted between 1991-1996, occupied at least half, or more than half, of the page space allocation of these textbooks, excluding the cover. The visual text, therefore, has considerable impact, not only in terms of its aesthetic and interest value, but more importantly it's intended function of providing meaning to the learner. It is crucial then that the learner recognizes, understands and interprets the content and style of the visual imagery and the integrated meaning from the composite, visual and written, text.

However, as mentioned in the Introduction, black primary-school children are sometimes unable to recognize and interpret visual imagery. This is considered to be primarily due to their lack of existing and

early childhood informal exposure to pictorial material in books, as well as the dearth of existing resources for learning and reading available to them outside of the classroom.

Fuselgang states that,

"People learn to read pictures just as they learn to read pages in a book. This is not recognized because learning to read pictures is an informal process. It goes on automatically in societies where a variety of pictures are presented daily through a variety of media. In social environments with no pictorial tradition or very few pictorial representations - the informal process of learning to read pictures simply does not occur." (1982:145.)

"... [T]he deprived milieu in which South African black children usually grow up, results in their being under prepared to enter a Western-orientated education system in which various perceptual skills are taken for granted." (Blacquièrè, 1988:61.) In the multi-cultural classroom learning situation, if children do not have pictorial perceptual skills on a par with those of their counterparts, they could be delayed in the process of constructing meaning from visual imagery in educational textbooks. Black primary learners may already be experiencing difficulty learning through English as their medium of instruction (see Appendix 1), and could find that, not only is the written text difficult to understand, but the visual text - which is intended to assist learners understand the written text - is also not understood. Blacquièrè cautions that, "... the simple expedient of adding text to an illustration to enhance identification may actually be counter-productive as ... the frequent well-intentioned linking of visuals and words may well be confusing to some young learners because they are required to translate and relate the messages of more than one symbolic code at a time." (1988:56.) (See Chapter 2, p.30.)

This can then affect the child's whole process of learning meaningfully from the textbook, consequently they may lag behind, or alternatively, 'skip' or miss sections of information in order to keep abreast with general class progress. Thus the child can be prevented from learning new information and concepts, which can impact on their current and later learning, as they have not perhaps learned those concepts and skills necessary for that particular stage of their educational development.

Visual Imagery in Textbooks

Visual imagery in textbooks generally fulfils the important function of facilitating, contributing to, elucidating, supporting and complementing the written text, presenting and representing an entire range of ideas, subjects or events, not possible in purely written terms, including otherwise unfamiliar, unknown or imaginary subject matter; or, as an autonomous medium, of communicating information independently of the text. (Totemeyer, 1984:36.)

Although, "[t]he text ... dictates the framework ... the more pictures there are in proportion to the text, the more the illustrator becomes involved in his[/her] partnership with the written word until, in the profusely illustrated [text]book and ... picture story book, we speak of composite verbal-visual narration or

exposition." (Schwarz, 1975:11.) Hence the use of the term, visual text, which suggests that the illustration is integral to, interdependent and integrated with the written text and thereby contributes equally to the meaning of the whole (composite) text.

It is important, therefore, that the visual text integrates with and 'fleshes out' the meaning of the written text, otherwise it could nullify or obscure its intended meaning. The full meaning of the illustration, "... can only be revealed in the context of its dependence and interdependence ... [on the written text]. [However] ... the combination of the verbal and the visual never means that contents and meanings may be translated from one medium to the other. It is always a matter of transfer, of transformation: no communication in any medium is ever exactly translatable into any other." (Schwarz, 1975:4,10.)

Furthermore, unlike verbal communication, written and visual text offer no immediate feedback. The effect of the context in which a picture is seen in a text is restricted - if the reader does not understand what is on the page, either written or visual text, "... they are almost entirely dependent on their own resources to solve the puzzle - by rereading, consulting other texts, or asking another person for help." (Blacqui re, 1995a:90.) It is crucial, therefore, that the alliance, integration, or interdependence between the two main elements of the textbook be congruent and effective - notwithstanding the given expectation that the individual elements, themselves, must be meaningful in their respective functions.

In language and content subject learning, concepts and information are more clearly shown and easily understood when represented through diagrams, illustrations, maps, and other forms of visual support. (Pit-Corder, 1973:41.) Visual support helps to integrate the material presented, and assist the reader to make inferences from the written text, thereby improving comprehension. (Moore and Skinner, 1985:47.) Furthermore, constant associations between concrete or abstract concepts are conducive to meaningful interpretation (Turbayne, 1962:94-100 in du Plooy, 1989:27) which Pit-Corder terms, "... a sort of verification procedure." (1973:3.)

Some of the functions of visual text are therefore to:

- Provide referential and metalinguistic functions. (Peters, 1977 in Blacqui re, 1988:65.)
- Create and bridge communication gaps. (Blacqui re, 1988:65.)
- Provide visual content and context for learning. (Blacqui re, 1988:65.)
- Bridge oral and written concept formation. (Fuselgang, 1982:123-4.)

- Help students participate more broadly in the creation of language - used to translate and interpret their experience. Generate discussion and therefore language discourse - visual literacy activities should be applied in conjunction with verbal language abilities so that students should be taught to think through associative processes. (du Plooy, 1989:11.)
- Re-inforce meaning and thereby creation of optimal learning. (Smith, 1960 in Benjamin, 1989:15.)
- Provide meaning for the reader of an unfamiliar language. (Smith, 1960 in Benjamin, 1989:15.)
- Encourage learners to discover further. (Smith, 1960 in Benjamin, 1989:15.)
- Develop the skills of verbal literacy and visual literacy in the teaching/learning situation through the complementary co-dependence of word and image. (du Plooy, 1989:51-52.)
- Explain information, show visual concepts and ideas through diagrams and illustrations.
- Provide aesthetic appreciation, visual stimulation and enjoyment for the learner.

Visual Media Influences

The traditional art forms of indigenous black South African cultures were those of decoration, pattern, and hand-crafted items for functional and ceremonial use¹⁷. The majority of these original art forms have either changed, adapted or disappeared - due mainly to the urbanisation and industrialisation of black ethnic groups and the subsequent influence and incorporation of Western and African (surrounding and North, of South Africa) designs, styles and subject matter for the commercial and tourist markets¹⁸. The prevalent use of 'ethnic' geometric patterns and designs in graphic and textile design, is directly attributable to the influence of traditional black artistic design. The only consistently authentic examples of indigenous South African black cultures are fast becoming those preserved for the tourist trade. Although the overriding influence is that of the West, in determining styles of dress, furniture etc., certain traditional items and forms of dress, e.g. ceremonial shields, weapons, beadwork, basketwork and ornamentation are still made and used for traditional rituals and ceremonies observed today. It is posited therefore, that the traditional art forms of indigenous black South African cultures do not have a considerable visual impact and influence on black primary-school children today, especially those from the urban and peri-urban areas.

The current art forms of black South African cultures and artists, found in art galleries and similar, are also considered to be an insignificant influence due to the relative inaccessibility of galleries and these artists to urban black primary-school children¹⁹ as a whole.

Comparatively, the insistent and powerful visual media, imagery and art forms generated by commercial advertising, television, video, film, music, media and sport industries have a far stronger visual appeal and influence on urban black primary-school children - the most prevalent of these influences are considered to be those of television and advertising. Advertising imagery and photographs, abound on the covers of

newspapers and magazines, billboards, package labelling, bus-shelters, posters, shop windows/fronts and the like.

The influence of videos and films and reading materials such as magazines and comics would depend on their availability and affordability. The viewing of television on the other hand, is available to many black children especially those in urban areas. In areas which are not electrified, car batteries are used as a power source and for those families who do not own their own televisions, communal viewing of television is a common practice.

Television is a two-dimensional moving visual medium of three-dimensional visual reality and created graphic imagery. It is posited that children who are consistently exposed to this visual medium, will acquire those visual perceptual skills necessary to view the two-dimensional imagery and three-dimensional reality projected by this medium.

Although, the viewing of television by children has been blamed for a "decline in test scores, and the shortened attention spans of students requiring the teacher to act as entertainer rather than educator" (Lloyd-Kolkin, 1982:100 in du Plooy, 1989:4.); the improved achievement and intelligence test scores (particularly among pre-school and primary-school children) are also attributed to television. (Debes, 1975; Rogers and Baron, 1976, in du Plooy, 1989:4.) The potential for television and related technology to offer some solutions for the inadequacies evident in education for black primary-school children - an aspect of which is the shortage and lack of effectiveness of textbooks - is enormous. Public television channels screening educational and informative programmes already provide a valuable supplementary service. However, it is unlikely that in the immediate future, television will occupy a central place in the classroom learning situation, as Blacqui re (1995b:1) mentions, the hard-pressed South African educational budget cannot afford high technology across the board. Therefore the textbook will remain the officially prescribed main communication resource in school education for a while to come.

It would appear that television as a resource and medium for the 'casual' acquisition of visual perceptual skills, will have a far greater visual influence than imagery in textbooks and books, due to the ease and immediacy with which it can be viewed, the young age at which children begin viewing it, the entertainment value and lack of any negative associations to do with 'learning' attached to it. In black South African society, where books are not a traditional cultural heritage, and in the less advantaged strata of this society, where literacy is a problem and books are not easily accessible - the audio-visual medium of television (and the audio medium of radio) have filled the gap as general media sources for information and entertainment.

It is postulated then that the visual media generated by television and advertising are the two most significant sources of visual imagery determining the visual perceptual skills of urban black primary-school children today. These acquired visual skills are brought by the child to their understanding and interpretation of visual imagery in educational textbooks. However, these tele-visual and visual perceptual

skills may not be entirely those which are necessary for understanding and deriving meaning from visual imagery in educational textbooks.

The teacher's mediation of visual imagery

Teachers may need to explain visual imagery in textbooks to their pupils, especially where new concepts or information are being introduced. The teacher's mediation of the visual text is, therefore, important for the child's understanding of it. As Robinson and Mentor (1991:220) point out, "...ultimately it is the teacher's understanding and use of that material which makes it educational or not."

Reynolds and Baker (1987:118) found that children "have to be taught explicitly to attend to pictures, graphs and tables in their texts, as they do not seem to do this naturally." Davies and Green (1984:6 in Langhan, 1990:88) also mention that the provision of learner support aids by authors and publishers (including tabulation, graphs, photographs, drawings, maps of different types, charts, calendars and the like), only facilitate pupil learning, "...if they are properly and actively utilized by teachers and pupils." Moore and Skinner's hypothesis that "...illustrations can help to integrate materials and help the reader make inferences from a text, thereby improving comprehension.", is only likely to be true if the structures are understood, concepts mastered and meanings and details explained, and importantly if teachers are able to direct pupils to illustrations and guide their interpretation of them." (1985:46 in Ibid:89.)

When children are not taught, from an early age, to interact with and 'attend to' visual text - although they may exhibit a natural interest in pictures - they may not perhaps necessarily view visuals as an integral part of or descriptive of the written text. Therefore, the teacher would have to firstly, teach the child to attend to visual material, and secondly, explain the meaning of any imagery. However, if teachers themselves are not entirely sure of the meanings and construction of some visual texts (Langhan, 1990; Blacquiere, 1995a:100), they could either 'gloss over' them or perhaps teach the child incorrectly. Pit-Corder (1973:50) suggests that teachers can also relinquish responsibility of interpreting the visual text to the children, as they assume that the designer of the materials is specialized in skills in which the teacher has not been trained, and as such they can, therefore, view the "textbook as bible". (Monyokolo and Potenza, 1996:1.)

The developers of visual texts

The responsibility for the quality, type and efficacy of visual texts in textbooks is that of the developer or creator of these images. To determine who creates and determines these images, an outline of the process generally followed by educational publishers for the development of visual text²⁰, is the following:

Educational publishers either write and develop their own materials 'in-house', or commission textbook authors to write on a given subject. Generally, authors submit an artwork brief, of varying length, detail

and prescription (depending on the author and publisher concerned) to the publisher's editor along with their manuscript, but are usually not encouraged by publishers to supply illustrators or 'finished' artwork of their choice to be used in the final text. The art designer decides on the design and layout of the text and determines the size and amount of illustrations needed, usually in consultation with the relevant subject editor. The subject editor decides finally on the content of the artwork brief and any resource material (sometimes) for the illustrator, with or without consultation from the author. The subject editor acts in a mediatory and liaisory capacity with the designer, author and illustrator, throughout. The editor, author (sometimes) and designer decide on a 'style' for the illustrations and commission and brief an illustrator/s (mostly free-lance) to illustrate the text within a given time period, which is normally quite short. The illustrator then gives the 'rough' sketches to the editor and designer for consideration, and returns later with the final illustrations, which may or may not have to be re-worked. Once completed, the illustrations are scanned into the written text, thereafter the process becomes technical in nature in terms of reproduction and printing of the textbook.

The respective publishers of educational textbooks^b, their editorial personnel, designers and the illustrators whom the publishing personnel commission, and to a varying extent the textbook author²¹, are therefore, responsible for the development of the visual text in educational textbooks.

Conclusion

In Chapter One, the learning deprived socio-cultural and educational environments of many black primary-school children is described. For many of them, the only textbooks, story books and books generally, which they have access to, are those which are provided and prescribed for them in the formal learning environment - where no shortage of these books exists. Therefore, the educational quality and effectiveness of these prescribed learning materials assumes a critical role in their learning process. However, research shows that textbooks can contain visual texts which are not understood or successfully interpreted by black primary-school children. This is due mainly to the fact that they have not developed the necessary visual perceptual skills or educational visual literacy to interpret the intended meaning from certain visual texts in educational textbooks - for the simple reason that they have not learned to read and interpret this Western visual code, through a process of informal sustained exposure to pictorial material in books from a young age.

It was established that educational publishers, illustrators and to a certain extent the author, are responsible for the learning quality and appropriacy of visual texts in textbooks. The relevant publishing subject editor and design editor are ultimately responsible for the quality and appropriateness of the artwork brief, while the illustrator is then responsible for the technical execution of that brief.

^b. Henceforth, 'educational publishers', 'publishers' or 'publishing personnel'.

ENDNOTES: CHAPTER ONE

1. First code extracted from Foley, 1993:146, second code extracted from Redmond, 1995:36.
2. Tramps and hoboes chalked or scratched on gateposts and doors as warnings or recommendations to their fellow wanderers. (Foley, 1993:146.)
3. Dondis's (1973) considerable work becomes the aspirant's manual for an education into Western art and visual media imagery and its attendant perceptual and artistic conventions. He is a strong proponent of the visual nature and character of learning, and contends for the inclusion of art as a subject, and visual thinking as an approach to learning, into educational syllabi and curricula.
4. Jan van Riebeeck arrived from Holland with three ships to settle in Table Bay (Cape Town) on 6 April 1652. (Davenport, 1977:52.)
5. Khoisan hunter gatherers and African tribal societies, had lived, mined, farmed and traded for several hundreds of years throughout what is known today as South Africa. Archaeological findings throughout the country, some dating as early as 300 A.D., have enabled archaeologists to lay to rest the 'empty land' myth. This myth claims that the ancestors of the present African peoples of South Africa migrated southwards across the Limpopo at much the same time as the whites were first settling in the western Cape in the mid seventeenth century. (Maylam, 1986:9,17.)
6. The Nationalist Party policy of ethnic self-determination and development, or racial separateness, was a thinly-veiled divide-and-rule strategy to separate the different ethnic groups in South Africa, which resulted in the Group Areas Act in South Africa, as well as the establishment of 'Bahtustāns' or Homelands. Many black, coloured and Indian people were forcefully relocated to these areas.
7. H.F. Verwoerd, who became Prime Minister in 1958, spelt out the meaning of the Bantu Education Act in 1953. "It is the policy of my department that [Bantu] education should have its roots entirely in the Native areas and in the Native environment and in the Native community There is no place for the Bantu in the European community above the level of certain forms of labour ... it is of no avail for him to receive a training which has as its aim, absorption into the European community, while he cannot and will not be absorbed there. Up until now he has been subjected to a school system which drew him away from his own community and practically mislead him by showing him the green pastures of the European but still did not allow him to graze there. This attitude is not only uneconomic, because money is spent on education which has no specific aim, but it is even dishonest to continue with it. The effect on the Bantu community we find in the much discussed frustration of educated Natives who can find no employment which is acceptable to them. (Malherbe, 1977:546; Schadeberg, 1990:80; Senate Debate 1954 (col.2595 to 2622).)
8. The Department of Education and Training, previously the Department of Bantu Education, was the controlling body for black school education in South Africa. In terms of recent educational legislation it has now been dissolved and is being absorbed into the respective provincial departments of education.
9. On 27 April 1994, the African National Congress won the majority vote in the first ever free and fair elections held in South African political history, in which all South Africans over the age of 18 could vote.
10. " There will be one national education and training system. It is the responsibility of the state to see that all people are given a fair and equal chance to study. Everyone will learn the same knowledge and skills. All children will go to school for at least 10 years. This schooling will be free and compulsory ... it will also aim to give a better quality of education." (ANC Policy Guidelines, 1992:30-31.) " [The ANC's]...prime education objective is for literacy and basic numeracy for all." (James, 1991:4.)
11. The Third Alternative was a massive, privately funded, thirty month investigation into the state of South African education, findings were published in 1990.
12. The Cape Education Department could not supply figures for the availability of school library services, due to the take-over process from DET to provincial education department. Figures would only be possibly available in two years time.

13. READ is a non-profit non-governmental organisation providing black schools with libraries, books and teacher training. The percentage of schools reached by READ was difficult to determine, as certain schools are fully 'serviced', whilst others are 'visited'. READ's involvement is dependant on the school's voluntary participation.
14. National Literacy Co-operation. A national alliance of non-governmental literacy and adult education organisations.
15. Despite grim socio-economic realities many parents of black primary school children are committed to ensuring their children receive an adequate school education.
16. The term 'visual text' includes all those illustrations, diagrams, visual support and information in educational materials. The term is used interchangeably with those of, 'illustration/s', 'pictorial material/s', 'pictures', 'visual imagery', 'visual material' etc.,
17. The traditional indigenous South African art and craft forms are decorated functional and utilitarian articles from the different tribal societies e.g., Ndebele, Xhosa, Zulu and Sotho. A fashioned object which had no function was rare indeed - object was made for a definite purpose and was valued because of its effectiveness in serving this need, as well as for the skilled craftsmanship displayed. For non-ritualistic objects the form and decoration were at the discretion and personal taste of the craftsman. Examples of traditional tribal art are decorated functional household utensils and personal articles, furniture, ceremonial and ritual fetishes, images and masks, musical instruments, weapons and articles for personal, ritual and social adornment made from wood, grass, beads, clay, animal skins, berries, horn, bone, feathers and different metals. (Grossert, 1985; Mountain, 1995; Levitas, 1987b.)
18. Elizabeth Dell writes of a 'transitional' art which is developing in South Africa, which " ...includes forms of art transitional between traditional tribal art and the modern art forms found in current African societies." She defines transitional art as " ... art undergoing transition from one form or context to another. The term ... defines art conceived specifically to leave its place of origin bound for enshrinement within another culture. This applies to art moving between two markets; the traditional and the metropolitan or to art undergoing formal evolution. (1981:45.)
19. This does not suggest, however, that 'high art' forms are irrelevant, merely that they are more remote in terms of their 'every day' influence due largely to their financial and inaccessibility to the general public. It is probable that the type of saleable 'framed art' which is more commonly seen, is that which is sold in supermarket and furniture chain stores.
20. This process was drawn up in consultation with a subject editor from a local publishing company.
21. The control which the author has to determine the content and style of the final artwork is often at the discretion of the editor, or general company policy.

Chapter Two

Culture and Visual Perception

"One sees what his culture has trained him to see." (Selden, 1971:88.)

The first anthropological definition of the term 'culture', by Sir Edward Tylor, a Nineteenth Century anthropologist, reads, "... that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society." (Sass, 1987:67 in du Plooy, 1989:30.) In a world made smaller and increasingly cross-culturally hybridized through the advance of technology and geographical movement of people, according to Bergen (1992:6), culture is defined by, a common language, shared patterns and customs of practised behavioural norms and perceptions, which are accepted and expected by an identity group. Language is perhaps one of the most cohesive ways in which groups "... maintain and reinforce similarity of perception." (Bergen, 1992:6.)

The 'complex wholes' of culture are in a state of continual flux and change. Patterns of perceptions and behaviour are shaped and changed by environmental, social, political, economic and ecological factors. "Consequently, new perceptual groups are constantly being formed, while existing groups are themselves in a state of flux." (Bergen, 1992:6-7.) Cultural boundaries may merge or disappear as experiences and practices become increasingly more or increasingly less common. History and the present evince the influence of one cultural or ethnic group entering the geographical 'space' of another such group. Neither group is found without some degree of influence from the other.

South Africa is considered by Collins and Gillespie (1984:625) to be one of the most racially (and culturally) heterogeneous countries of the world. Within this spectrum of racial heterogeneity there exist many sub-cultural or intra-cultural societal groups. Certain intra-cultural groups may be so disparate to one another, i.e. socio-economically, professionally and behaviourally, that there exists little which is common between them, beyond the shared characteristics of racial group and language.

Across racial cultural groups there may also exist many inter-cultural and societal groups. Despite not sharing obvious racial cultural group characteristics - the more common ground of belief and practice that individuals and groups have, the more likely they are to cohere and constitute an identity group.

Bloomer (1976:78.) expresses the belief that, "People may have difficulty comprehending that something as basic as (visual) perception is culturally based." Segall et al., ask the question, "Is human perception culturally influenced? Can the same stimulus appear differently to different people simply because they are members of a different culture?" (1966:3.) The authors answer their own question thus: "Basic perceptual mechanisms are universal, but different visual ecologies lead to different interpretations of the

same visual cues." (1966:6.) Findings from numerous cross-cultural and inter-cultural research studies on adults and children in South Africa and Africa²² concur that socio-cultural factors directly influence the way visual representations are interpreted. Various determinants within, and without of, a socio-cultural group will give rise to a unique 'visual ecology'. A part of the usual distinction between sensation and perception is that perception contains culturally learned meanings and integrations. (Segall et al., 1966:6; Zimmer and Zimmer, 1978:20.)

Ethnocentrism or phenomenal absolutism proceeds out of enculturation. A significant feature of the enculturative experience is that this process can be so effective that individuals often cannot imagine that perceptions, other than their own, are possible. The individual remains unaware that their perceptions are in fact a result of a learning process of which they may not be conscious. (Segall et al., 1966:10; Morgan and Welton, 1986:68.) Furthermore, vision and visual perception are so microgenetic²³ it can be difficult to comprehend that this process is affected and conditioned by learning.

Visual Perception

"Seeing is accomplished not in the eye, but in the mind." (Welford, 1968:32.)

Visual perception is a complex microgenetic biological process where sensory information or stimuli are beamed on light waves to the retina and the imaged stimulus is then projected into the mind; the perceptive dynamic occurs when the stimuli interacts with and is integrated into the existing structures of experience and knowledge in the mind. This perceptual process is one of the main factors determining how various visual stimuli are perceived, by children and adults, both in their collective socio-cultural and individual capacities.

Two main schools of visual perceptual theory appear to exist, the one being that of 'active selection' and the other that of 'passive reception' by the viewer.

Passive reception theory

The passive reception theory, as the term suggests, posits that the process of visual perception is a passive receptive process - a mere mechanical registration or "pickup of photic²⁴ information" (Walker, 1978:21 in Burnett, 1989:6.) Visual perception is therefore nothing more than a conscious experience of sensory input, in that the conscious experience is determined solely by the properties of the stimulus. (Jordaan and Jordaan, 1989:397.) As such, incoming 'photic information' is not interpreted, selected or modified in terms of its 'fit' with the viewer's existing schemata, associations or experience. Rather, " ... picture recognition is largely an innate and unproblematic skill", as pictures provide the same optic information as the depicted object or scene. (Walker, 1978:21 in Burnett, 1989:6.)

Active selection theory

The active selection theory submits that the mind contains remarkable 'overriding principles' which spontaneously, actively and constantly sort and select incoming data into simple meaningful wholes to construct and derive meaning, on the basis of minimal information. The human organism cannot simultaneously register and recall every detail of an entire visual moment-in-time spectrum. The brain scans a scene and actively selects important details and relegates the rest to a ground of irrelevant information. As such, the process is predominantly spontaneously actively selective rather than passively receptive. The theory of active selection is supported by Gestalt²⁵ theory, in this respect, that a shape or structure as an object of perception, forms a specific whole and has properties which cannot be completely deduced from a knowledge of the properties of its parts. (Welford, 1968:58; Burnett, 1989:7; Fuselgang, 1982:145; Jordaan and Jordaan, 1984:371; Lucie-Smith, 1984:88.)

The two theories of passive reception and active selection are not viewed, in terms of this research, as being opposing theories but are considered to rather conform to a compatible rather than disparate axis. It is difficult to determine the divide of precisely when and exactly how much information from ambient imagery and stimuli is absorbed unmediately and passively in an environment of sustained exposure and familiarity - and how much is actively taught and learned through a process of socio-cultural conditioning. It is posited that the amount which can be learned through unmediated passive sensory perception is limited but would augment the active learning process.

Perception as integration

The whole process of perceptual selection, organization and integration is designed to secure meaning, make closure and maintain orientation through economy of decision. Maximum data is treated in minimum terms as the mind selects only as much as is necessary to obtain meaning and make closure. Science codifies this as the 'Law of Parsimony' - the best scientific application is the simplest one that fits the data. (Bloomer, 1976:14.) These 'minimum terms' are the active selective processes operating in conjunction with existing prototypes, perceptual frameworks or schemata, with which we interpret, and into which we integrate all new information coming to us. (Jordaan and Jordaan, 1989:371; Blacquière, 1995:88.) " Selection seems to be made both in terms of simple sensory qualities and more complex semantic aspects of incoming data ... " (Welford, 1968:6), " ... including memory in the cybernetic²⁶ sense and cognition in the interpretative sense." (Bergen, 1992:6.)

This actively selective process of spontaneously 'fitting' incoming data into existing frameworks can be regarded as a 'perceptual response' in which the observer is active, but not always consciously so, as the process is microgenetic. For example, as this page is being read, the mind sees not individual letters, but words and sentences, which form meaningful wholes.

Features of Visual Perception

The brain operates in various ways to process data, the perceptual operations considered relevant to this research are discussed.

Closure and redundancy

Experience plays a dominant role in perception. The mind attempts to construct meaning, maintain orientation or make closure when presented with a stimulus or image. If the visual stimulus is completely unfamiliar and there are no known or understood visual cues present, then the brain cannot make closure. If there are some known cues present then the brain can make closure, of some kind, if not what was intended by the encoder. Closure frequently occurs by naming the stimulus. If the mind cannot make closure, e.g., when an unfamiliar word is seen in a written text, the mind tends to skip and ignore it, and form meaning from the surrounding text. However, once the meaning of the word is understood, it is surprising how often the word is considered to appear. (Bloomer, 1976:14.)

If the message is not correctly interpreted by the encoder, due either to differing perceptions or to distortions in the system, enough of the message usually gets through to convey the general meaning intended, resulting in what is termed, redundancy. (Bergen, 1992:7.) This can take the form of repetitions and affirmations, in one or more codes, which ensure that the message is understood. (Blacqui re, 1995a:90.)

Aberrant decoding

Aberrant decoding occurs when the decoder interprets the meaning or message of a code - for various reasons - differently to that which the encoder originally intended. An aberration in interpretation and communication of the code implies that there is a degree of distortion and loss of meaning. Although an aberrance in decoding is often negative in connotation - by way of example, the Spanish artist, Pablo Picasso, and British sculptor, Henry Moore, both profited greatly from aberrant decoding. The former from early African mask sculpture and the latter from neolithic European sculpture (Morgan and Welton, 1986:38.) Neither necessarily understood the religious and/or social functions and canons which informed the sculptors creations, but simply decoded these conventions in terms of their own experience and absorbed them into their own creative oeuvres.

Pre-patterning

All of the mind's perceptual mechanisms are directed toward synthesis and closure, by constructing

meaningful wholes from an arrangement of sensory data and stimuli. The mind imposes a perceptual pattern on the stimulus. The stimulus does not determine closure; instead existing categorizations and schemata in the mind determine how the stimulus will be perceived. The mind is therefore not 'open-minded'. It is postulated that the mind will bend and distort its perception of a stimulus to classify or fit data into an already established category. (Bloomer, 1976:14.)

Enhancement of meaning and perceptual skill

Meaning is enhanced if new information can be categorized or expanded into existing prototypes or schemata in the mind, and therefore can be spontaneously recognized. (Jordaan and Jordaan, 1989:371.) In the same way that people learn to perceive in certain ways, individuals can become perceptually skilled or competent in different aspects and at different levels. (Jordaan and Jordaan, 1989:402.) When presented with a complex message or new stimuli, the receiver is likely to prefer and focus particularly on aspects which either confirm or re-enforce existing schemata of knowledge or prejudice. More perceptual attention is given to messages or stimuli that are preferred. If the source of the message or stimulus is mistrusted or disliked the perceptive response is likely to be hostile. (Morgan and Welton, 1986:51.)

Anticipation and creation of perceptual hypotheses

A perceptual hypothesis refers to the tendency, during perceptual selection, to form an implicit hypothesis based on, if this ... then that. Conscious expectations or anticipations arise in relation to existing prototypes or experience. (Jordaan and Jordaan, 1989:371.)

Negative transfer effect and cognitive dissonance

Consistent with the Law of Simplicity and the brain's pre-patterning mechanism, is the 'negative transfer effect'. If new information or stimuli do not fit into existing categories, the mind becomes confused as it seeks to fit incoming data into existing schemata. If there are insufficient known cues within the unfamiliar stimuli, to fit or even bend this new data into an existing prototype, the brain is unable to make closure of any kind. It can resolve the confusion by simply rejecting or ignoring the new information, resulting in cognitive dissonance. (Morgan and Welton, 1986:53; Bloomer, 1976:14; Welford, 1968:27.)

Internal model systems are essentially conservative - showing inertial drag to change - for internal models must reflect the past rather than the present. (Welford, 1968:27.) The mind operates conservatively from the 'known' and incorporates the 'unknown' - through learning, exposure or association - into related categories, or expands and alters existing categories. As the mind integrates new incoming data as economically and simply as possible, it is more economical to integrate data into, either an existing

category, or to reject the data - than to create new, unrelated and foreign categories into which this data can be fitted. Lanham (1990:181) relates the importance of introducing new concepts and information in terms of existing background information/schemata and their closeness of 'fit' to those schemata. Fuselgang (1982:123) reminds that, '... the oldest pedagogical rule [is to] ... start with what the students know, not with what you know.'

Valence

Certain aspects of a visual image are of much greater importance and value to the observer than other aspects; Gestaltists termed this process 'valence'. This was observed by Fuselgang (1982:152) using an ophthalmograph or eye-marker to trace a viewer's eye movement on a photograph of a smiling woman. The eye focused almost exclusively on the mouth, eyes and a beauty spot, as from these features the expression mood and character of a person are often gauged.

Scanning

Scanning is the rapid survey of a stimulus and selection of details of highest valence - preceding closer examination of the stimulus. (Welford, 1968:53.) Scanning serves to expedite the perceptual process, e.g., immediately recognising a friend in a crowded restaurant or searching for a word or a sentence on a page.

Congruence or deviation and figure-ground separation

New incoming sensory data is either congruent and readily incorporated, or deviant, in which case, the initial focus is on the congruent data, while the deviant data is relegated to a 'background' which can be ignored and often cannot be reported in much detail upon recall. This appears to result in 'unwanted' data being in a very real sense attenuated. (Welford, 1968:5,6,18,19.)

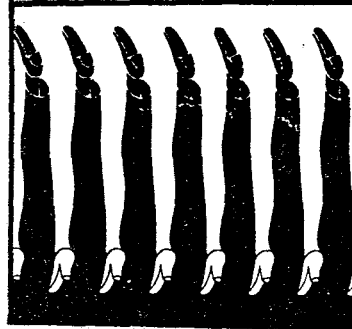
Individuals tend to see figures or objects as separate from their surroundings. The mind organizes and selects the figure/object or relevant information from the visual pattern or stimulus and the irrelevant information becomes ground. (Jordaan and Jordaan, 1989:380.)

Noise

Any factor which shares or is present in the same code/channel/medium and interferes with or obscures the message, preventing the decoder from completely receiving/ perceiving the message or meaning in its entirety.

Alternating figures

Alternating figures occur when certain sensory information 'calls' up two or more compatible internal models with equally probable meanings. The example below of legs, indicates how easily the brain transforms and organizes information from the retina; the retinal image has not altered yet the perception of it has. (Welford, 1968:30; Bloomer, 1976:12.)



Children's Learning Processes

There are many features present and inherent in the child's process of learning, four of these, namely, cognitive ability, information processing, conceptual learning and spatial concepts are discussed briefly.

Cognitive development

According to Jean Piaget, the renowned Swiss psychologist, different levels and features of cognitive ability are present and evident at certain ages in children and adults. These age-related cognitive levels are considered to be both biologically inherent and universal. The child's inherent cognitive ability will determine their potential for learning certain information and concepts. However, the child's educational and socio-eco-cultural environment determines which cognitive abilities are developed, which concepts are learned, and the extent to which these are developed.

Ohuche and Otaala (1981:55) in reviewing findings from testing of cognitive mechanisms, skills and conceptual development in Africa²⁷ concluded that Piagetian theory with regard to cognitive development is universally applicable, as it takes into account maturation and environmental influences, and has far reaching implications for educational application. In South Africa, Hosken (1972:234), using Piaget's theories of cognitive development, undertook an investigation into the ways in which children from three different ethnic groups (black, coloured and white) perceived space. He found that the three ethnic groups "... displayed the criteria of each developmental level, or stage and in the same order." Hosken found that Piaget's theories of cognitive development were evident in all three groups, and like Ohuche and Otaala, he concluded that they are, therefore, universal.

Piaget's theory of cognitive development

Based on Piaget's age-group parameters for the 'concrete-operational' stage of cognitive development; black and white primary-school children who fall within the eight to eleven year old age-group category were selected as subjects for this research. This study does not, however, investigate or compare their levels of cognitive development, but the age-group criterion provides for a relative parity in their cognitive ability, although the characteristics of this stage are not present throughout the different ages.

At the concrete-operational stage of cognitive development, systematic thought is developed but only in relation to concrete objects and activities. "The present and actual is well understood at this age ..." and greater and lesser degrees of properties can be established e.g., seriation²⁸. (Boden, 1979:67-8.) The child can now take two or several aspects of a situation into account and co-ordinate them according to simple logical laws. It is generally concluded that children who attain the last sub-stage of this period all reach it after having followed the same sequence, for each particular concept. Some children do not seem to reach the last sub-stage in some conceptual areas. Whether this is true only at the performance level (answers given to tasks) or also at the actual competence level (capacity for reasoning) is largely dependant on the situation's or subject's content. (Ohuche and Otaala, 1981:62.) The concrete-operational stage does not appear as a continuum, but at different ages within the age group parameters, depending on the difficulty of each concept, which Piaget terms 'horizontal décalage'. Horizontal décalage suggests that all concrete operational tasks cannot be equally well performed by the child. (Boden, 1979:69; Ohuche and Otaala, 1981:61-67.) Children's levels of development could be quite different; therefore, results from concrete operational concept tasks should be viewed in terms of, which conceptual area was studied and which task was used. (Ohuche and Otaala, 1981:57.)

Information processing

Children and adults have the same relatively fixed channel capacity or information processing limits. However, the speed with which children are able to encode a stimulus would depend on how the stimulus is organized, and the amount of information that children can memorize, which is related to and symptomatic of the structure of their knowledge and cognitive levels. Parallel processing refers to the mind's ability to consciously focus on a specific number of items simultaneously, without loss or distortion in the transmission and reception of information. In such situations, both depending on the level of attention required and the individual's experience, training will be needed before anything approaching error-free performance can be achieved. Implicitly, when individuals find themselves in an unfamiliar situation and are expected to react to and process more than a relatively small number of elements, they will be overwhelmed by information and uncertainty, and may therefore make mistakes. (Wood, 1988:31-3; Jordaan and Jordaan, 1989:389.) (See Chapter 1, p.15.)

Conceptual learning

A concept is defined as a set of abstracted features which together form a category. The ability to discriminate enables a child to learn concepts, which are formed through an abstractive process and thereby relate and apply the particular concept to other situations. The child has learnt a concept once they are able to apply the principles of the concept meaningfully to different situations. (Jordaan and Jordaan, 1989:534-5.)

Wood (1988:70.) mentions that when learning new concepts the child will be able to synthesize objects into a larger whole when the individual elements (or cues) are meaningful to the child, otherwise no such synthesis or closure can take place.

Spatial Concepts

The child's understanding of spatial concepts and relationships is an important aspect of this research. A feature of concept development is the understanding of the spatial location of objects (or places) and their interrelationships in a picture plane and implicitly, understanding three-dimensional relationships on a two-dimensional surface. " ... [M]an makes so much use of shapes drawn on flat surfaces that his ability to comprehend these has reached a high degree of efficiency ... but this capacity must be learnt and the child only acquires it gradually, and sometimes only after much teaching." (Vernon, 1969:56.)

According to Piaget (1948) in Ohuche and Otaala, the young child starts to understand topological spatial relationships first, these are: simple concepts such as next to, on, curved versus straight, open versus closed, etc. Later the child acquires projective concepts (directions, angles, point of view) and Euclidean²⁹ concepts (distances, spatial coordinates). These concepts are needed to understand geometry and geography at school, and in daily life, for spatial orientation beyond the immediate neighbourhood. (1981:65.) Topological properties seemed to be universal whereas cultural differences are found in the development of projective and Euclidean concepts. From a series of studies³⁰ in various parts of Africa, Ohuche and Otaala (1981:65) concluded that, intercultural differences are least in tasks involving topological concepts, and that projective and Euclidean relationships emerge relatively late. Many African children have not completely mastered projective and Euclidean concepts by the end of primary-school, which affects later learning at high school and tertiary level. (Pers. Comm., Virginia Spies, Biology Teacher, black secondary-school).

Communication

Communication Model

Encoder	Code		Decoder
Who says	what	with which means	to whom
Sender	Message	Channel/Medium	Receiver
Encoder	Code	Rules of Code	Decoder
Communicator	Message	Channel	Recipient
Artist	Content	Medium, style, culture	Viewer ³¹

Communication is an interactive process, whereby an encoder submits a message /code to the decoder. The code usually contains an intended meaning created by the encoder, to be received by and understood by the decoder. *Successful communication* takes place once the encoder has interpreted the intended meaning from the code.

The meaning of a message itself, is not fixed and absolute; it is produced by an interaction between the communicator, the recipient and the context. (Morgan and Welton, 1986:30.) The area where the sender's and the recipient's fields of experience and perception overlaps that of the other is the setting for their communication. The amount of common ground or overlap that exists in this overlap is crucial to the success of a communication (Blacqui re, 1995a:88.); where they overlap, meaning can be produced, if they fail to touch, meaning is impossible. (Morgan and Welton, 1986:49.)

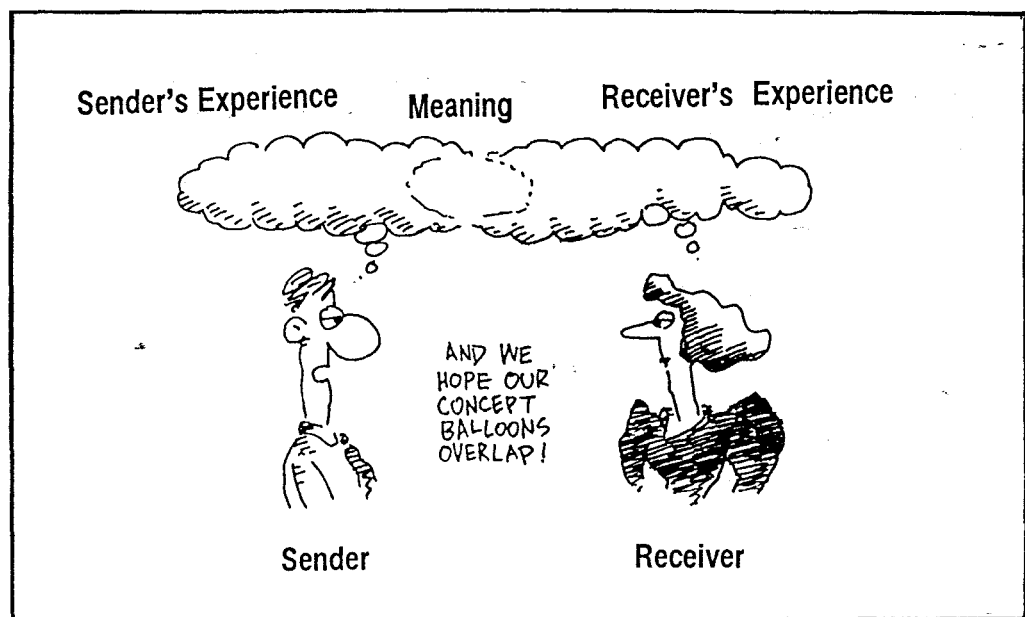


Diagram adapted from L. Gonick, *The Cartoon Guide to (Non) Communication* -
The use and misuse of information in the Modern World, p.76

Considerable potential exists for different perceptions or distortion to create mis-communication and mis-understanding in the communication process . (Bergen, 1992:7.)

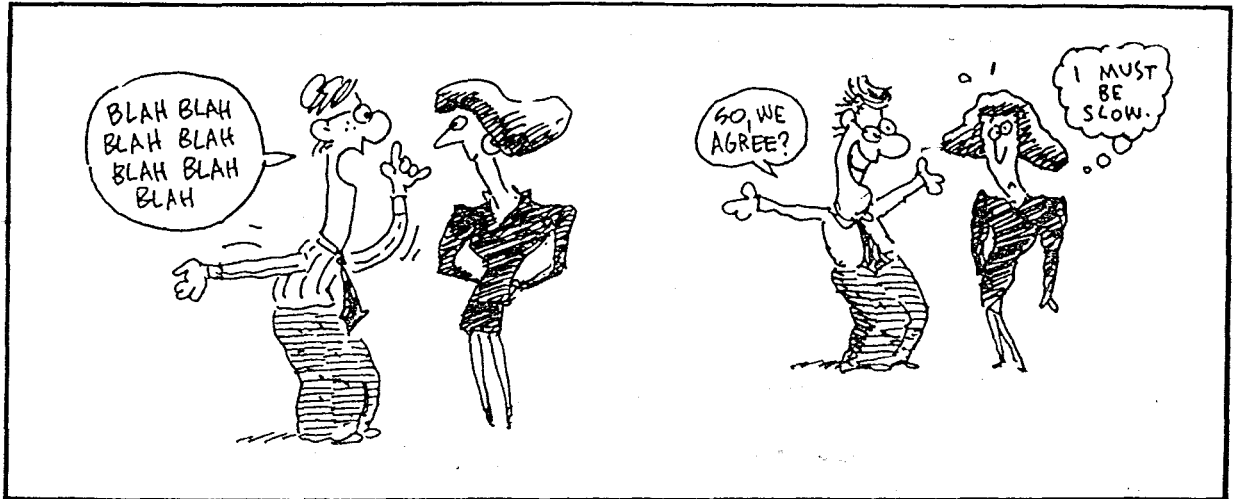


Diagram adapted from L. Gonick, *The Cartoon Guide to (Non) Communication* -
The use and misuse of information in the Modern World, p.77

A device to correct misinterpretation inherent in the communication process is the 'feedback mechanism' - which allows for the continuous testing of accuracy of perception. Until one of the groups recognize that their perceptions differ markedly from those of the other, and makes a concerted attempt to understand the other's perceptions, the incidence of friction and frustration is likely to continue. (Bergen, 1992:7.) It is precisely for this reason that the demand is growing for greater participation of users in the planning of materials and proposals intended for their benefit.

According to Tomaselli and Tomaselli (1984:114) who tested the success of community health care posters with members of an Eastern Cape community, "The design needs to be context-based. Design should follow in-depth research, not only of the problem, but of the target readership and their interpretative patterns."



Diagram adapted from L. Gonick, *The Cartoon Guide to (Non) Communication - The use and misuse of information in the Modern World*, p. 80.

Cross Cultural Communication

Cross-cultural communication usually refers to communication between individuals or groups belonging to different geographic boundaries or racial groups. However as discussed at the outset of this chapter, culture does not necessarily recognise the delineations of national or racial boundaries. (Bergen, 1992:7.) An individual is in fact functioning somewhat 'cross-culturally' whenever they communicate with another individual, when not of the same or similar sub-cultural or identity group. Sometimes intranational communication can be far more cross-cultural than certain international communication. (Ibid.:7.) For example, middle income urban professionals involved in rural development programmes are sometimes chagrined to find their endeavours misunderstood and rejected by the low-income, rural farm worker of the same racial group as themselves.

Although language acts as a cohesive factor in establishing and maintaining groups, Knapp and Knapp-Pothoff (1987:1) found in ethnographic studies in urban communication that problems of inter-cultural communication are often exacerbated when members of one group acquire a native-like fluency in another groups's language, which is not paralleled by a shared knowledge of the ways of thinking and knowledge which are usually taken for granted in interaction for that community. Differences in this kind of knowledge, constitute problems of intercultural communication. (Knapp and Knapp-Pothoff, 1987:1.)

Successful cross-sub-cultural or identity group communication demands an adequate level of knowledge and understanding by the encoders of the decoder's perceptions. "... [B]y knowing more about the way people from different cultures see and think, one will be able to avoid making unfounded assumptions about what kinds of messages they can or cannot understand." (Burnett, 1989:6.)

The textbook - a cross-cultural medium

This research focuses on educational textbooks as the written and pictorial medium most commonly used for communicating information in the classroom. Many textbooks for black primary-school learners contain Western layout and design principles, as well as visual texts which contain many aspects and examples of Western artistic, stylistic, graphic and symbolic conventions. The encoders of this medium are the writers, editorial publishing personnel, designers and illustrators of this medium. If the encoders are predominantly educated middle to upper class South Africans, the majority of whom are white³² (Chapter Three, p.3) - who by implication share similarities of perception and experience - create an educational message-code for educationally and economically disadvantaged black primary-school children, it can be considered a cross-cultural educational communication through the textbook as medium.

The 'life-space' overlap between the decoders and encoders could, in certain instances, be rather small in relation to the enormity and responsibility of the educational task. The onus is therefore, on the encoders - as creators and submitters of the code - to expand their knowledge of the decoder's experience and perceptions; to allow for sufficient overlap between the two parties' 'life-spaces' in order that this important communication be effective.

Visual cross-cultural educational communication

In the cross-cultural educational context, illustrators from one group create a message with a visual syntax, intended for users of other cultural or sub-cultural groups. The illustrator constructs and arranges stimuli and visual signs into this syntax or image, which causes the viewer to construct in their own mind, an interpretation from these stimuli. (Bloomer, 1976:58.) If the viewer is to obtain closure and interpret the intended meaning they must be able to understand the visual syntax or code which the artist/illustrator has created. Interpretations of visual codes may vary between cultural and sub-cultural groups if different associations and understandings are attached to the 'same' image - or if the stylistic conventions used are not familiar to the user - the code can be aberrantly decoded, redundant and at worst, cognitively dissonant. If the intended meaning is not being successfully communicated, meaningful learning cannot take place and the visual syntax may fail in its educative function.

A belief exists - certainly a belief must inform a practice - that there is an 'universal or international' style for the presentation of visual information, which as the term leads one to assume is understood and accessible by all cultures; or that pictorial codes will not be aberrantly decoded by mere virtue of their being 'pictures', therefore the meanings extracted will be the same for all groups.

If there were no continuum of similarity of perception between groups, like a common language, there would be no way of communication ever developing between them. (Segall et al. 1966:6.) Beyond language, there are universal perceptions of similarity, however, these similarities of perception can never be assumed, especially in a cross-group educational context, given the inherent human tendency toward phenomenal absolutism.

Signs and symbols

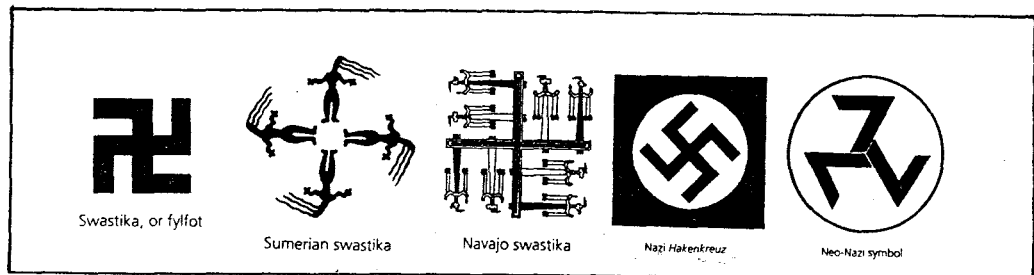
" Europeans use the expression, 'a place in the sun' as an ideal place to live or relax, whilst Africans, speak of 'a place in the shade.'" (Pers. Comm., Clifford Nxomani, 1993.)

Research has shown that even when objects depicted in pictures are correctly identified and depth cues understood, problems with interpretation still arise. Most problems occur because of the symbolic nature of pictures. (Burnett, 1989:19.) Like the universal art style assumption, in certain instances, people still assume that all pictures are iconic signs, that they mirror reality and that their meanings are fixed and easily accessible to all. (Ibid.:11.)

The word sign is applied to any graphic mark or symbol used to convey a specific meaning, or to any gesture intended to convey an idea or command. Signs are employed to inform, advertise, warn and direct. Symbols are understood as 'something that stands for, represents, or denotes something else.' This applies particularly to a tangible object representing something intangible or abstract, like an idea or concept, e.g., an owl symbolizes wisdom in Western thought. The word symbol is also interchangeable with that of sign. As such it describes a written character or mark conventionally used to stand for an object, quantity, value or process, e.g., letters of the alphabet, punctuation marks, numerals, music and mathematics. (Foley, 1993:9.)

The denotative or first-order meaning of an iconic image is more easily established than that of a word, due to the visually perceptible resemblance between the image and the represented object. The connotative or second-order meanings are determined by their context, convention (culture) and the viewer's perceptions, associations, experience and knowledge - these may vary from individual to individual and group to group and tend to be emotional in character. (Burnett, 1989: ; Morgan and Welton, 1986:31-37.)

A well-known example of a symbol is that of the graphic sign of the swastika which has been found on ancient Navajo blankets, Greek pottery, Cretan coins, Roman mosaics, Hindu temple walls, early Christian tombstones etc., and even used by Rudyard Kipling as a personal logo. As such, the swastika was used extensively by many cultures and religions mostly as a symbol which denoted good luck, well being and immortality - this was until the Nazi's adopted a form of the swastika on their flags and uniform in 1919. (Morgan and Welton, 1986:31-37; Foley, 1993:99-100.) The sign now evokes memories of genocide and German fascism. It is still used, with variations, by right wing fascist groups throughout the world and in South Africa.



J. Foley. 1993. *Signs and Symbols*, p.99, 136-7.

Another more local example, is that of the owl. (See Appendix 11, p.9). A white South African illustrator was requested to illustrate a book for the Constitutional Assembly to explain the intended South African constitution to local, mainly Xhosa, communities. Being from the Western cultural group she perceived the owl to be a symbol of wisdom. As such, she used the owl extensively throughout this book, only to later discover that the presence of an owl is a bad omen and can even be a portent of death in Xhosa tradition and belief. Needless to say the owl was hastily removed and replaced with a 'neutral' bird, the implications for not having done so may have been somewhat unfortunate.

Conclusion

In this chapter, it is explained that the visual influences, practices and values of the child's socio-cultural environment have a significant influence in determining their visual perceptual skills.

Textbooks for black primary-school children are the educational medium most commonly used for the communication of learning information in the classroom. The encoders of visual texts in textbooks are educational textbook authors, publishing editorial and design personnel and commissioned illustrators; many of whom are predominantly from the educated middle to upper middle, and upper class, social strata of South African society, and were drawn mostly from the white ethnic group. The decoders, in this study, are firstly, black primary-school children from educationally and socio-economically backgrounds,

and secondly, white primary-school children from, comparatively, educated and socio-economically advantaged middle to upper-middle class backgrounds.

In this instance, learning through the textbook as medium, can be deemed to be a cross-cultural or cross-sub-cultural communication for the black group and a mostly intra-cultural educational communication for the white group. Difficulties arise when there is not a continuum of shared knowledge, perceptions and skills, between encoder and decoder in cross-cultural or cross-sub-cultural communication, which are taken for granted in intra-cultural communication. This factor requires that, in the cross-cultural learning situation, developers of educational visual texts have a knowledge of the decoder's formal learning and visual perceptual skills, and, the background experience and influences of their immediate environments. However, as research attests (see Introduction) black primary-school children are in certain instances not deriving the intended meaning from certain visual texts in educational materials. By implication, the encoders are therefore producing visual texts which are not appropriate for the learning needs and pictorial perceptual skills of black primary-school learners.

Although many disadvantaged urban black primary-school children are exposed to the considerable visual media influences of television and advertising in their socio-cultural environments, the visual perceptual skills they acquire, may not be entirely those which are necessary to interpret the visual imagery in educational textbooks.

This research sets out to attempt to establish answers to the following questions in Chapters Three, Four and Five:

- Are the encoders aware that black primary learners may have difficulty successfully understanding some visual texts?
- Do the encoders know which particular aspects in or of these texts cause difficulty in this regard?
- Do they receive adequate feedback from black primary-school learners to determine if these users understand the intended message and communication in visual texts?
- Are there weaknesses or shortcomings, therefore, in the encoders process of visual text development?
- Which aspects of visual imagery in educational materials are difficult and/or not meaningful for black primary-school children to understand and relate to?

ENDNOTES: CHAPTER TWO

22. Segall, Campbell and Hersokovitz, 1966; Hudson, 1962a; Duncan, Gourlay and Hudson, 1973; Erasmus, 1975; Zimmer and Zimmer, 1978; Lavallee and Dasen, 1979; Okonji, 1976; Ohuche and Otaala, 1981; Fuselgang, 1982, 1983; Tomaselli and Tomaselli, 1984.
23. The succession of events which take place in the minimal time lapse between the reception of information at receptor level and the formation of, a precept, or conscious experience. (Jordaan and Jordaan, 1989:371,337.)
24. Photoc: of light, light giving, sensitive and accessible to light, optic.
25. Gestalt: German for configuration of shape. The term, Gestalt theory is borrowed from Gestalt psychology, founded by German psychologists.
26. Cybernetic: the comparative study of automatic communication and control in functions of living bodies.
27. Dague (1970a & b); Lloyd (1972); Serpell (1976); Wober (1975).
28. Forming a series, e.g., biggest to smallest.
29. Euclidean space: kind of space with the axioms of Euclid, a geometrician and mathematician of Alexandria, c. 300 BC, are valid, in which a straight line may be produced to infinity. The geometry of ordinary experience.
30. de Lemos (1974); Beard (1968); Vernon (1969); Page (1973); Jahoda, Deregowski and Sinha (1974); Kirk (1977).
31. Communication model drawn from Peters, 1977; Blacquièrè, 1988 and du Plooy, 1989.
32. This scenario is changing rapidly in South Africa with increasing numbers of black, coloured and Asian personnel employed in textbook development and publishing.

Chapter Three

SECTION 1:

Research Methods

"Research is ... the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis, and interpretation of data. It is a most important tool for advancing knowledge, for promoting progress, and for enabling man to relate more effectively to his environment, to accomplish his purposes, and to resolve his conflicts." (Mouly, 1978 in Cohen and Manion, 1989:42.)

Cohen and Manion (1989:41-2) define 'methods' as:

"The range of approaches used in educational research to gather data which is to be used as a basis for inference and interpretation, for explanation and prediction ... eliciting responses to predetermined questions, recording measurements, describing phenomena and performing experiments. The aim of methodology is to arrive at an understanding, in the broadest possible terms, not of the products of scientific research enquiry but the process itself."

The two main objectives of this study were addressed using the following methods:

1. To establish which aspects of visual texts in educational materials, black primary-school children from disadvantaged backgrounds experience difficulty understanding and interpreting, responses were elicited to selected examples of visual text using the Structured or Research Interview method (see Chapter Four). To determine whether these difficulties were due either to socio-cultural and educational background factors, or to poorly executed visual text; the responses of white children were compared to those of the black children.
2. To evaluate the process generally followed for the development of visual texts in educational materials, and to assess the developers' knowledge concerning black primary-school children's levels of Western pictorial perceptual skill, educational publishing editors, designers and illustrators were interviewed, and publishing personnel were also sent a Postal Research Questionnaire.

The interviews with the developers of visual texts were conducted prior to those with the children. It was envisaged that the findings of the former, would be important toward the compilation of the Research Interview for the latter.

Interviews with Publishing Personnel and Illustrators

The intention behind interviewing publishing personnel and illustrators was to establish the following:

Publishing personnel and illustrators:

- What the interviewees understood about 'visual literacy'.
- Whether they knew which aspects of visual text in educational textbooks black primary-school children could have difficulty understanding and relating to, and, their knowledge of and exposure to their background experience.
- Any information which would assist toward formulating the Research Interview and with the research generally.

Publishing personnel:

- Whether they trialled (field-tested) their materials, and visual texts, prior to publication and whether they received adequate feedback from the users of their materials.
- How they anticipated catering for the different skills and levels of skills of learners in the 'multi-cultural' learning situation with particular reference to visual texts in textbooks.
- How well they briefed illustrators/artists as to the perceived and actual difficulties black primary-school children may experience interpreting educational visual texts.

Illustrators:

- How illustrators viewed their working relationship and developmental function with respect to the triad relationship of editor/designer, author and illustrator.
- Their opinion of artwork briefs received from the publishers.
- Their knowledge of which aspects of visual texts black children have difficulty understanding and interpreting.

In this chapter only those findings relevant to the inclusion of elements in the Research Interview are noted, the remainder are discussed in Chapter Five.

Interview method and technique

The non-directive or focused interview technique was used for the interviews with the publishing personnel and illustrators. This unstructured interview technique allows for open-ended responses from the interviewee with regard to their subjective attitudes, experiences, practices and perceptions, in a manner which leaves the interviewee free from interviewer bias. An interview guide was used concerning the main areas for inquiry and discussion. (Cohen and Manion, 1989:326.) The interviews were tape-recorded, as this method of recording data is considered to be the most reliable (Powney and Watts, 1987:124), and were transcribed and appended to this dissertation.

Six major South African educational publishing companies in Cape Town were approached³³, of these, seven senior personnel from five companies were willing to be interviewed. (Ibid.:49.) Interviews were conducted with three illustrators who were commissioned regularly by more than one of the publishers interviewed, and had all worked consistently and at various times for different educational publishers.³⁴

A preliminary discussion was held with each of the interviewees to explain the research and to give an assurance of confidentiality and anonymity. (Ibid.:123.) It was explained to the interviewees that the intention was to tape-record and transcribe the interviews, append them to the thesis and quote from or refer to them if necessary.

Brief profiles of editorial personnel and illustrators

Of the six personnel interviewed³⁵, for the first publishing company (Publisher One), a subject editor and design editor were interviewed, for the second publisher (Publisher Two), an editorial manager and managing director were interviewed, for the third publisher (Publisher Three) a subject editor was interviewed, for the fourth publisher (Publisher Four) a materials developer and subject editor were interviewed. All the interviewees were of the educated upper to upper-middle class income groups, and all the interviewees except one, were of the white ethnic group.

At the time of interviewing, Illustrator One had worked full-time as a free-lance illustrator for two months, and prior to that for four years on an irregular free-lance basis. Illustrators Two and Three had worked as full-time free-lance illustrators for periods of eleven and four years, respectively. All three illustrators were white and of the middle-class income group.

Postal Research Questionnaire

A postal Research Questionnaire was sent to seven publishing editorial and design personnel from four of the publishing companies (which were previously interviewed), requesting that they identify those aspects

they viewed as important for inclusion in this investigation. Five were editors, one was a design editor and another worked in a research and development capacity. Three editors (one of whom was a textbook writer) and one design editor responded to the questionnaire. Of the four respondents, only one had not been interviewed.

The postal questionnaire method was used to allow the respondents sufficient time for consideration and response to the questions. This information was not requested in the immediacy and limited time of the focused interview setting. (See Appendix 4 for completed (anonymous) postal Research Questionnaires)

Methods and Techniques for Research Interview

Structured/ Research Interview

The 'Structured or Research Interview' method was selected for the interviews with the children, as it prescribes that direct standardized questions are asked of all the interviewees and allows for parity and uniformity of measurement when recording and analysing their responses. (Cohen and Manion, 1994:276, 312.) Schedule items were included in the Research Interview questionnaire to facilitate the recording of the children's responses on a scale of fixed alternatives. (Ibid.:313.) (See Designing the Research Interview, this chapter)

Space and investigator triangulation

Cohen and Manion (1989:269) define the term 'triangulation' in research as, "... the use of two or more methods of data collection in the study of some aspect of human behaviour ... [to study] it from more than one standpoint", and thereby avoid the, "... ubiquitous but generally more vulnerable single method approach." (Cohen and Manion, 1994:233.) One of these triangulation methods is that of 'space triangulation' (Ibid.:235-7) to which the present study subscribes. A group of black and a group of white primary-school children were interviewed and the findings analyzed and compared; providing a comparative study to overcome "... the parochialism of a study conducted in the same country or within the same subculture." (Cohen and Manion, 1989:272.)

Investigator triangulation refers to the use of more than one observer in a research setting, to counter that which Cohen and Manion term 'interviewer bias', which is often prevalent when the researcher is also the interviewer and the analyst. (Ibid.:12,274.) Although the majority of questions in the Research Interview were designed to preclude open-ended type responses from interviewees, an observer (who also fulfilled the role of translator) from the same community as the black children, was requested to assist with the interviews with the black children, to ensure that they understood the questions, and that the researcher

understood their responses, correctly. The translator was briefed beforehand concerning the background and intentions of this study and interviewing skills and techniques (see below).

Interviewees

A sample of twenty-three children, of the eight to eleven year old age group, were selected for the Research Interview: ten black primary-school children, ten white primary-school children and three black primary-school children for the Pilot Study. The choice of a relatively small sample size was due to the intensive nature of this study, which investigated several aspects of visual text and incorporated over two hundred and eighty examples of visual imagery - and the subsequent analysis, comparison and interpretation of the data collected.

The selection of the interviewees subscribes to the sampling process defined by Cohen and Manion (1994:89) as, 'purposive sampling', whereby the research objectives determine which categories of interviewees were required; those children who fitted the categorizations were identified and approached to be interviewed.

The ten black primary-school children interviewed, live in the Westlake informal settlement (squatter camp) situated in a dip below the intersection of the M3 highway and Ou Kaapse Weg Road, in Tokai, Cape Town (see map below). The residents comprise of mainly black and coloured people, from the Transkei and other Cape Town townships. They live without electricity and running water and their very small houses are built ingeniously of 'found' materials. Most of the children attend nearby English-speaking suburban schools in the traditionally white suburbs of Retreat, Heathfield, Tokai and the coloured suburbs of Lavender Hill, Steenberg etc., while some children also attend schools in the Cape Town townships of Langa, Khayelitsha and Guguletu, some distance away.

The ten white English speaking primary-school children were drawn from Muizenberg, Lakeside and Marina da Gama, in the southern suburbs of Cape Town and attended nearby English-speaking suburban schools. To gain access to the black children the Westlake Informal Settlement Committee was approached for permission to conduct the research with the children in their community. The parents of eight of the white children were contacted directly and permission was requested to interview their children, except in the case of an afternoon care facility, where permission was requested from the person in charge to interview two children.

The choice of the interviewees age-group ascribes to Piaget's age-group approximations (seven to eleven) for the 'concrete-operational' stage of cognitive development. (See Chapter Two.) No seven year old children were selected for interviewing since most children do not enter primary-school (Sub A/Grade 1) at this age.

Translation of interviews and use of translator/observer

The interviewer is a mother tongue speaker of English (second language, Afrikaans) and the black interviewees are mother tongue speakers of Xhosa (second language - mostly English or Afrikaans), therefore, language was an important consideration as, "sometimes language can block understanding between people, especially when they do not share common vocabulary or meanings" (Powney and Watts, 1987:14.) "Language differences between informant and interviewer ... [have] many consequences beyond what is, or is not, translated for analysis. The informant's point of view, ... [could be] analyzed according to the interviewer's concepts, rather than those used by the informants themselves." (Ibid.:11-12.) For these reasons the assistance of an observer/ translator from the same community as that of the black children was requested. This did not offer a guarantee that the questions and responses would be completely translated as, " [t]he translation of questions and instructions from one language to another presents great difficulties in establishing functional equivalence." (Ohuche and Otaala, 1981:68). It did however, go a long way toward ensuring that the children could understand the questions correctly and respond in their mother tongue, which was often the case.

Ms Primrose Ngamlana, a forty-five year old resident of the informal settlement community who spoke English fluently, was approached and agreed to assist with the Research Interviews as an observer/translator for the black group of interviewees. It was not considered necessary to approach an observer to be present at the interviews with the white children since the interviewer/interviewee relationship was intra-cultural and no translation was necessary. The Research Interview was designed to elicit simple one word or short sentence responses, which left little room for mis-interpretation by the interviewer.

A teacher or person unfamiliar to the black interviewees was not approached to act as translator, as firstly, the research was conducted on an informal basis - outside the school and classroom environment - to create a relaxed environment for the interview. Secondly, since the researcher was initially completely unknown to the black children, they benefitted from having a trusted and familiar person involved in the interview for 'moral' support. Thirdly, teachers could perhaps have engendered a sense in the children of their responses being somehow right or wrong; Powney and Watts (1987:48) make mention of the fact that, "Children have spent the years since birth coming to grips with parental demands and all their school lives working out what teachers want and how to please them." Furthermore, one of the publishing editors - in her responses to the Research Questionnaire - remarked that her colleagues and herself had experienced difficulty differentiating between the teacher's responses and children's responses to 'artwork'. (See Appendix 2.)

Non tape-recording of interviews

It was decided not to tape-record the Research Interviews as the questions allowed for simple one word

or short sentence responses, which were either recorded verbatim or itemized in the schedule on the Research Interview questionnaire. Space was also provided alongside the questions for alternative responses which were noted and recorded (see example of Research Interview - Appendix 4). The resource and time expenditure necessary for transcribing twenty-three one to one and a half hour interviews, some of them partially or fully translated, was not feasible. The interviewees responses recorded on the Research Questionnaire provided adequate and valid data for later tabulation and analysis.

Interview Techniques

The quality of the data collected from the research interviews depended largely on the skills of both the interviewer and translator. Fidelity to the interview questions and consistency in approach to each interview was, therefore, maintained as far as possible. Both interviewer and observer guarded against "unintentionally giving clues" to their own attitudes and responses to the questions or to the answers from the interviewees. (Powney and Watts, 1987:37-9.)

As children can be influenced or intimidated by their peers (Powney and Watts, 1987:48) in a group interview situation, it was decided to interview the children individually. Careful attention was given to recording the children's responses by checking where necessary that the interviewer had 'got it right', as young children can be more literal than adults and pay attention to unexpected details, perhaps disconcerting the interviewer who may be using different logic or priorities. (Powney and Watts, 1987:48.)

Prior to the interview, each child was thanked for being willing to assist with the research by participating in the interview. A simple explanation concerning the nature of the research was given (Powney and Watts, 1987:69), and that the interview was not a test with 'right or wrong answers', but that they should respond as honestly as they could. Every effort was made to create a natural relaxed association between the interviewer and both groups of interviewees.

Designing the Research Interview

The interview questionnaire was designed to include four main sections:

- Section 1: Profile of the Home and School Environment
- Section 2: Pictorial Conventions, Pictorial Symbolism, Graphic Symbolism, etc.
- Section 3: Object Recognition
- Section 4: Stylistic Preferences and Interpretations

A 'Profile of the Home and School Environment' was included to provide a brief biographical profile of the child's exposure to pictorial material, books, visual media, reading and technology in their home environment, including other factors like their parent/s/guardian's literacy. Some questions, e.g., 'Who is your favourite sport star/music star?', and, 'What is your favourite food?', though not of direct relevance to the inquiry, were added to make the questioning process relaxing for the interviewees, and to provide an extra indication of their exposure to media and Western culture. A question like, 'What do you like to wear?', also served to ascertain preferred styles of dress and youth culture aspirations. The questions pertaining to the child's formal learning environment were designed to ascertain the child's exposure to pictorial material in the classroom, the availability of textbooks, as well as extra sources for reading and learning.

In Sections 2 - 4, the questions asked were short and direct (Powney and Watts, 1987:118,135), the intention being to leave little room for mis-interpretation, given the age levels of the interviewees and the translatory context. The questionnaire was designed so that the interviewee's responses were recorded alongside the relevant questions either as schedule scale items³⁶, or written verbatim onto the space provided on the questionnaire page. For example, when the question was asked, "What is this?" (a lizard) - if the child simply shrugged their shoulders and/or said they did not know, the response schedule was itemized 'Not' for 'Not Identified'. If the child responded by saying that it was a lizard, it was marked 'Id' for 'Identified'. If they said it was a chameleon, this was noted in the space for alternative responses. If they paused for a while or appeared to attempt to volunteer an answer, but then retreated from giving a response, it was marked 'Un' for 'Uncertain' - as there may have been sufficient cues present for it to be familiar but insufficient cues for it to be recognized completely. (See Appendix 4 for Research Interview Questionnaire.)

It was anticipated that some illustrations of visual concepts could have been too advanced for the very youngest interviewees, e.g., a child of eight years old may not yet have learned the visual concept of internal views or x-ray diagrams. Therefore these questions were marked beforehand on the questionnaire with an asterisk and if the child was not able to understand the example due to their age, this was noted as such.

The selection of examples of visual text

In accordance with the artistic conventions, content and styles to be investigated, approximately two hundred and eighty examples of visual text³⁷ were selected from twenty-five educational textbooks, published for the first time, or revised and reprinted, between 1991-1996. The majority of these textbooks were expository texts and were intended, either for use by black primary-school learners or for primary-school learners from all of the South African racial groups. The twenty-five textbooks were selected from a range of one hundred and three different primary-school textbooks and story books (readers), published by six South African educational publishing companies (all of whom made their materials available to the

appropriate for inclusion in the Research Interview, without regard for the respective publishing company.

This approach was adopted as, firstly, the intention was not to perhaps indict or promote one publishing company by focusing exclusively on their published materials - as other publisher's textbooks may contain examples of similar aspects of visual text³⁸. Secondly, children may have used some of the textbooks and consequently may have been familiar with certain images³⁹ which could have enhanced their performance (Powney and Watts, 1987:69) in the Research Interview.

It was considered important to include different examples for certain of the aspects to be investigated as it may have been difficult to determine interviewees competence interpreting a particular convention from only one example, e.g., cropping, where three examples were provided. Interviewees could respond to other determinants in a single example of which the researcher may be unaware. Therefore, responses to more than one example would provide a more valid identification of the interviewees understanding for this and other aspects under investigation.

The majority of images selected from textbooks were printed in black and white and were photocopied for inclusion into the Research Interview. All photographs were printed in black and white, except for one used in the stylistic section. Full colour images which were used to determine interviewees stylistic preference and interpretation were reproduced by colour laser copying. The quality of the reproduced images was of a high standard. Some images were enlarged to aid viewing, while other images were reduced to facilitate their incorporation onto the pages for presentation to interviewees. No textbooks were used in the interviews. Photostatted and copied images were cut-out and pasted onto a single blank sheet of A4 paper, landscape orientation, in their order of questioning. These were then placed into plastic sleeves in a hard cover flip file, and shown, page by page, to the interviewees. Almost all written texts (captions, labels, narrative in speech balloons etc,) were eliminated from the images to ensure that the interviewee's focused on the images themselves and were not confused or aided by the written text in their responses. The researcher pointed to the relevant examples on the flip file page, asked the questions as phrased in the Research Interview questionnaire and recorded the responses on the same.

Pilot study

A pilot study enabled the researcher to modify an initial Research Interview questionnaire and interviewing approaches, before the "investigation proper" began (Powney and Watts, 1987:125), by conducting the Research Interview with three black children from the informal settlement - a boy aged nine, a girl and a boy, both aged eleven. The interviewees responses were recorded on the questionnaire, but were not included in the findings of the final Research Interviews as the questionnaire was modified substantially.

The following modifications were made:

1. The interview was shortened by removing certain examples, e.g., three images were presented to determine depth perception; the third image was excluded as the children exhibited relative ease understanding this convention.
2. Many questions throughout the interview were re-worded, shortened and/or made more direct. For example, the questions pertaining to overlapping, were re-worded as two of the participants understood the question, "Is the sheep standing next to the cow, or is it in front of the cow?", to somehow imply that the interviewee was standing at the back of the picture plane and not in front of the picture. The wording for this question were thereafter prefaced with, " You are standing here and this picture is in front of you - [is the ... etc.]"
3. Additional examples of certain conventions were added to the Research Interview Questionnaire, e.g., the pilot study participants appeared not to completely understand certain examples of graphic symbolism, e.g., lightning, explosions etc., therefore more examples of different graphic symbols were included, e.g., a person with a halo, depicting their goodness or holiness and a person with horns, depicting their badness or evil.

The interviewees appeared to be particularly unfamiliar with certain categories of items, e.g., the marine environment (apart from fish), and natural, biological items like pine-cones, acorns and ladybirds. Therefore a few more examples were included in these categories to determine the extent of their familiarity with these items, and/or whether it was the actual drawing of the items which resulted in the interviewees non-recognition of them.

The section on reduction and the inclusion of a scale item to facilitate size conceptualization were also added, as illustrations in textbooks generally contain more examples of images of reduced representations than magnified representations.

4. The process of questioning and recording responses was made as economic as possible, to facilitate later tabulation and analysis of findings.

Aspects of Visual Text selected for Investigation

From the completed Research Questionnaires and transcribed interviews, the following aspects in educational visual texts were considered by the respondents and interviewees to be potentially problematic for black primary-school children in terms of interpretation and understanding:

Aspects identified by both publishing personnel and illustrators:

(Those which were considered to be important for investigation by respondents are marked with an asterisk)

- *■ Perspective
- *■ Literal interpretation of abstract/decorative/figurative pictures
- *■ Style - painterly, cartoon and naive styles, excessive stylization, caricature and naturalistic representation
- *■ Relative size/ constant size/ accuracy of proportion
- *■ Cropping/truncation
- *■ Techniques for depicting volume - shade, light, shape
- Sequence and Comic format layout (tiers)
- Too much background or excessive detail, too many layers of imagery, resulting in loss of clarity and foreground imagery

Aspects identified by publishing personnel only

- *■ Unfamiliar objects not clearly represented
- *■ Careful introduction of and poor representation of scientific 'artwork' e.g., magnification, diagrams and cross-sections
- Overdetailed shading/ line hatching
- *■ Foreignness of subject matter e.g., illustrators and editors and authors may incorrectly assume that certain subject matter is understood
- *■ Cultural and family anachronisms
- *■ Superimposition/overlapping - obscured objects cannot be identified properly
- Inconsistencies from one page to the next
- Inaccuracy

Two of the respondents stressed that some of the aspects they listed (no specification given) may not only be problematic for black primary-school children, but also for South African primary-school children from other racial groups.

Aspects identified by illustrators only

- Odd perspectives/ Angles of view
- Semantic interpretation of objects
- Speech balloons
- Synthesis between written text and visual text

- Aesthetic and user-friendly layout and design of the textbook
- Arrows
- Overcrowding of comic design with speech balloons
- Children's preference for certain clothing styles and youth culture aspirations

Aspects of visual text included in Research Interview

Based on interviews with the illustrators and publishing personnel, responses from the Research Questionnaire (above), findings from existing primary research (mainly, Duncan et al., 1973; Benjamin, 1989; Tomaselli and Tomaselli, 1984) and examination of textbooks by the researcher, those elements in educational illustrations which were considered to be problematic, or potentially problematic, for black primary-school children to interpret and understand, and will be investigated in the Research Interview, are the following:

Section 2: Western pictorial, and graphic, symbolic and design conventions:

Form perception; Three dimensional depth perspective; Size constancy; Relative size; Oblique angle aerial view; Foreshortening; Truncation of figures by cropping; Speech balloons; Comic format sequence; Character continuity; Western pictorial symbolism; Arrows and direction of arrows; Graphic separation lines; Spiral line; Implied movement and graphic symbols; Section diagrams; Grainy photographs; Geographical cross sections of mountains; X-ray internal views; Magnification and reduction (with a scale item); Overlapping (superimposition).

Section 3: Subject recognition - living and non-living; Literal interpretation of style and content.

Section 4: Stylistic preferences and interpretation: different styles of realism; line hatching; silhouette style; stylization; photographs; cartoon like caricature.

Due to the nature and size of this study, only those aspects considered to be the most important and were feasible for investigation are included - see Appendix 3 for those aspects which were not included in the Research Interview, but are considered worthy of future investigation.

SECTION 2:

Aspects and Examples of Visual Text for Inclusion in the Research Interview

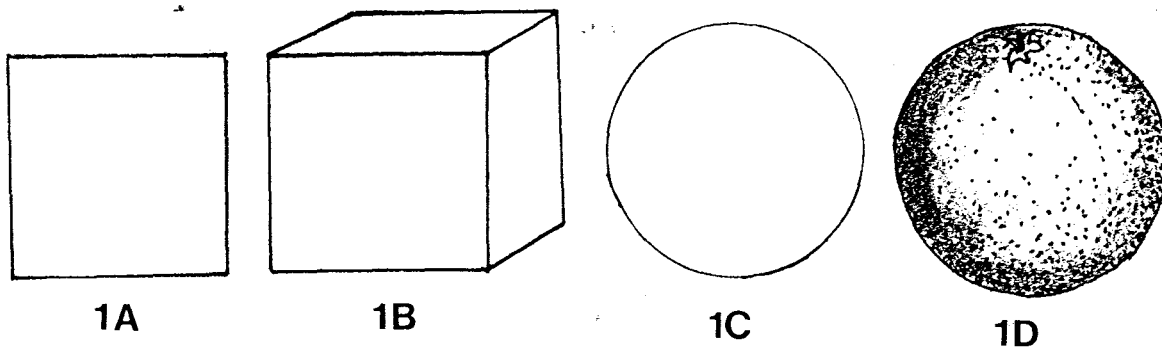
Please refer to Appendix 4 for the Research Interview questions which accompany the examples of visual text discussed below. The copies of the examples of visual text in this chapter, have been reduced from the size used in the Research Interview, for incorporation onto the pages in this section^a.

1. Form perception

Form perception is the ability to infer that a pictorially depicted three-dimensional object has volume and depth, therefore is not merely a 'flat' drawing on a two-dimensional surface, e.g., an outline of a circle may appear flat; if the circle is appropriately shaded to depict volume and roundness, it could represent a ball or an orange depending on the inclusion of the necessary visual cues.

It was not anticipated that this basic level of form perception would present any difficulty in interpretation for the interviewees. However, it needed to be established from the outset of the interview that they did understand this convention, as this could have a direct bearing on their understanding of other conventions under investigation in the Research Interview.

The following four examples were selected: 1A being an outline of a square and 1B a box or cube. 1C is an outline of a circle, while 1D is the same circle shaded to depict volume and is intended to represent an orange or similar. If the interviewees could recognize these as such, then it can be accepted that they have understood that figures 1B and 1D have depth and volume. The interviewee's responses did not have to be exact in terms of naming the examples, e.g., the circle could be called a round shape and the square a rectangle, box or cube, and the orange a tomato - the important response was whether they recognized that 1B and 1D inferred depth and volume.



^a. Some of the resolution and quality of the images, especially those of the black and white photographs, may have been lost, due to reduction and copying for incorporation into the thesis.

2. Three dimensional depth perspective

(For this question, three examples, 2A, 2B1 and 2, were selected for three dimensional depth perspective, size constancy and relative size)

Pictorial depth perception is a Western pictorial convention which exceptionally pictorially illiterate viewers may experience difficulty interpreting (Duncan et. al., 1973:8; Bloomer, 1976:78.)

Duncan et al. (1973:71), found from their investigation into pictorial perception amongst South African primary-school children, that the "... black groups are well below the European group in their ability to see depth" in pictures containing the main cues of overlap, relative size and horizon line. The urban black group being "significantly superior" to the rural black group. Benjamin (1989:58) found from her pilot study, that the children she interviewed "... did have problems in understanding [depth] perception cues" in relation to the illustrations they were shown.

Size constancy

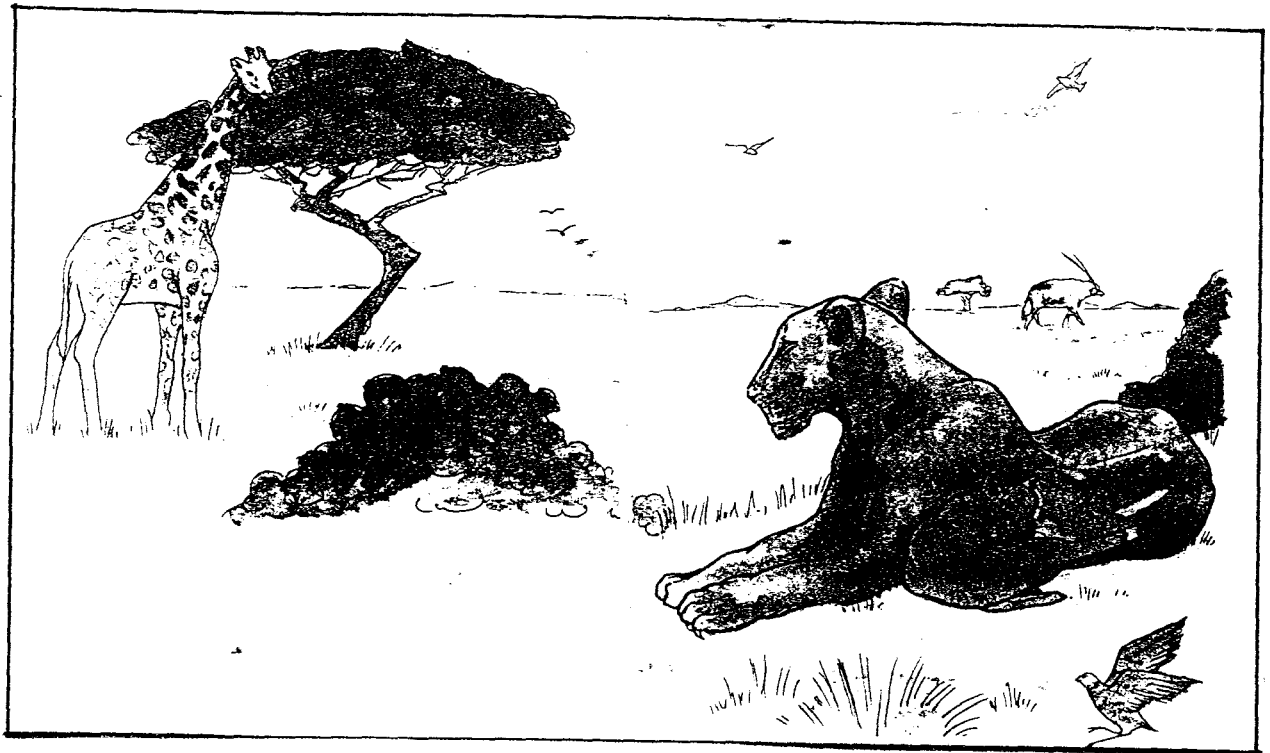
Perceptual constancy is a process whereby constancy is maintained in respect of size, shape, colour and brightness in spite of the changes or circumstances under which objects may be perceived. (Jordaan and Jordaan, 1989:363.) Size constancy refers to the constant size of an object/figure brought about by three integrated components: the size of the image on the retina, the presence of sufficient back ground information (depth cues) and previous experience. (Ibid.:363.) Shape constancy refers to the consistency with which a familiar object is interpreted, in typical or atypical position or viewed from different angles. Constancy of shape is based on a compromise between the retinal facts, the angle of the perceived object and previous experience. (Ibid.:364.)

Relative size

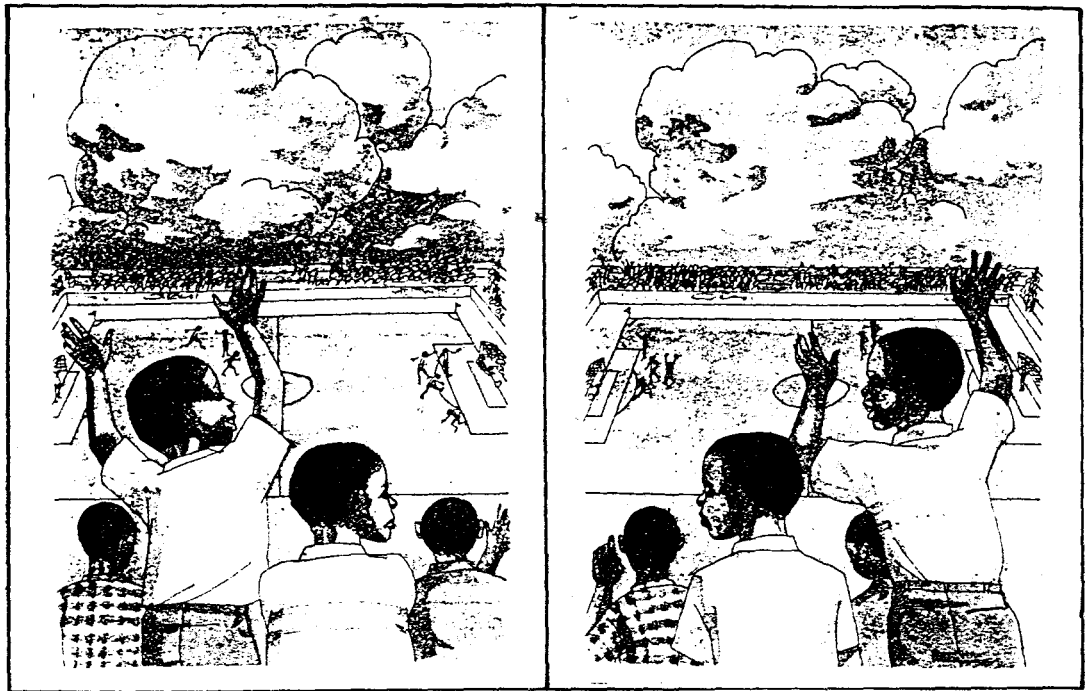
'Emmert's law', which pertains to relative size, explains that the further away an object is from the person looking at it, the smaller the retinal image is. (Jordaan and Jordaan, 1989:363.) This feature when rendered pictorially is used as a visual convention/cue to suggest depth in the picture plane. For instance, an object in the distance or on the horizon within a picture, may be depicted as small, whereas in reality it is large, e.g., a gemsbok. Foreground objects may be depicted as larger than background objects, although in reality they may be smaller, e.g., a lioness. If the convention of relative size is not correctly interpreted or familiar, viewers may interpret the gemsbok in the background to be far smaller than the lioness in the foreground. "... a reduced retinal image of an object at a distance is only one of the cues by means of which we estimate the size of objects, i.e., it is relative to other equally important cues in the total stimulus situation." (Ibid.:364.)

The interviewees were requested to identify the different animals in example 2A. If they were unfamiliar with any of them, it could affect their perception of relative size, constant size and, therefore, depth in the picture plane. If the interviewees identified the lioness as a tiger, then for questioning purposes the lioness was referred to as a tiger in subsequent questions, so as not to confuse the interviewees but rather deal with the aspect under investigation.

If, from example 2A, the interviewees could identify that the buck (gemsbok) in the background was bigger than the lioness in the foreground (and from the additional questions concerning the relative and constant size relationships of the rest of the animals), it can be accepted that in this instance the convention of depth perspective is understood. It was not anticipated that understanding these conventions would present any significant difficulty to either group of interviewees.



2A



2B1

2B2

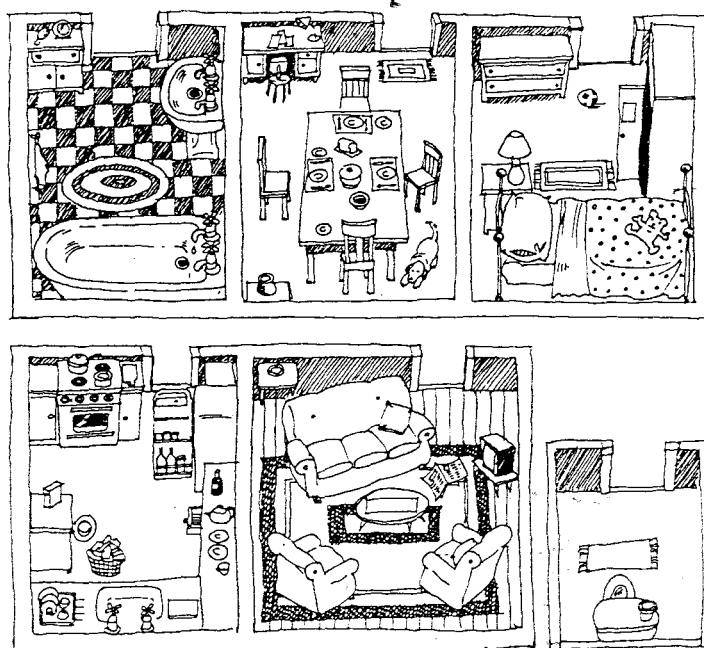
3A: Oblique angle aerial view

Considering and composing the most suitable angle of view for a picture is important as relevant information must be presented in a manner which makes it visually legible and meaningful (Wilkinson, n.d.:46) and where possible, aesthetically pleasing. Failure to do so may make the visual message incongruent, misunderstood or uncomfortable to view (Blacqui re, 1995a:119) Duncan et al. (1973:8), mention that Deregowski (1968b) found that the depth perception difficulties of African school children may be prompted by the very point of view from which the artists portrayed the scene and position of the subject relative to the depicted scene.

Direct overhead aerial views of objects or scenes often create difficulty in interpretation when these views are not normally seen. Familiar animals and objects that are below the normal human range of vision should generally not present difficulty, e.g., insects, dogs and cats. However other objects or scenes, may present difficulty due to their unfamiliar nature, e.g., direct overhead aerial photographs of agricultural land. The conceptual transfer from a normal view or perception of a scene, to an aerial view usually requires explanation and learning. An oblique angle aerial view is often more easily recognized due to the partially represented view of a particular scene or objects, and provides a conceptual link between the complete aerial view and a normal view of the subject.

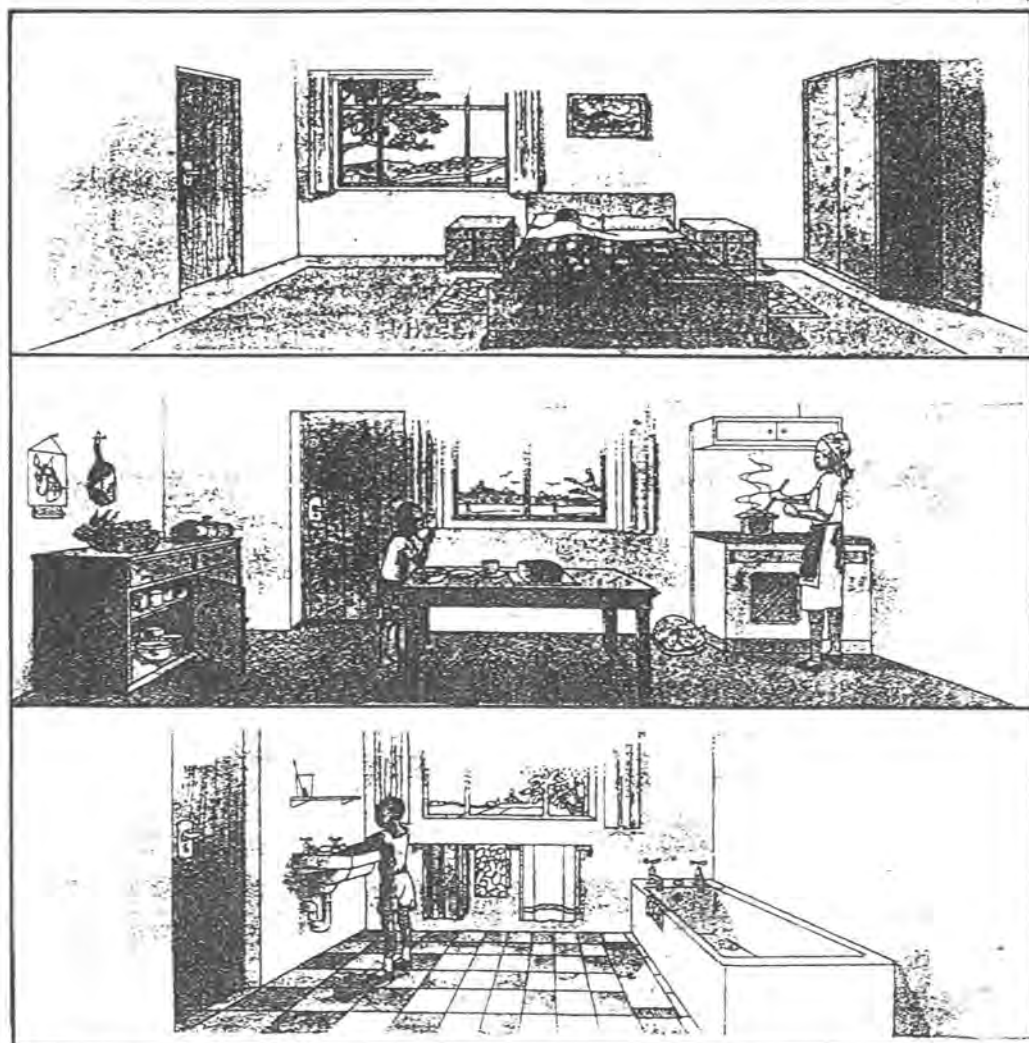
The following example of an oblique angle aerial view of several different rooms in a house was used to determine, firstly, if the interviewees could identify objects from this perspective, or angle of view, and secondly, whether they could identify the respective items of furniture as being those

from different rooms. It was anticipated that the final bottom right picture of the toilet may present difficulty in recognition, as it is not presented in true perspective in relation to the angle of perspective for the rest of the rooms.



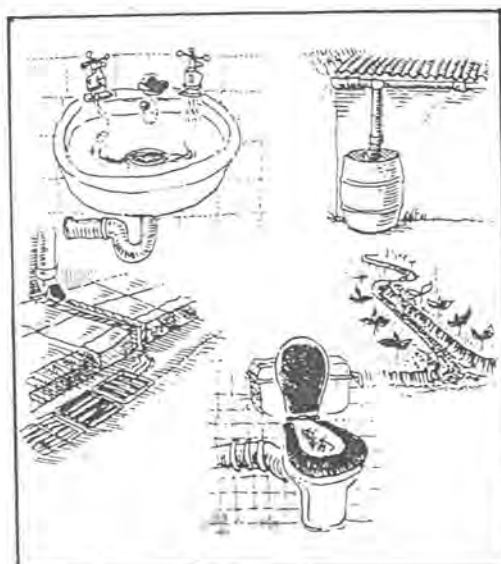
3B: Eye-level views

The following three examples were selected as normal eye-level views of rooms in a house. If the interviewees were unable to recognize any of the rooms in 3A above, their responses to these examples would determine whether it was the angle of view, or their non-identification of different items of furniture normally found in different rooms, which was responsible for their misidentification.



3C: Object recognition

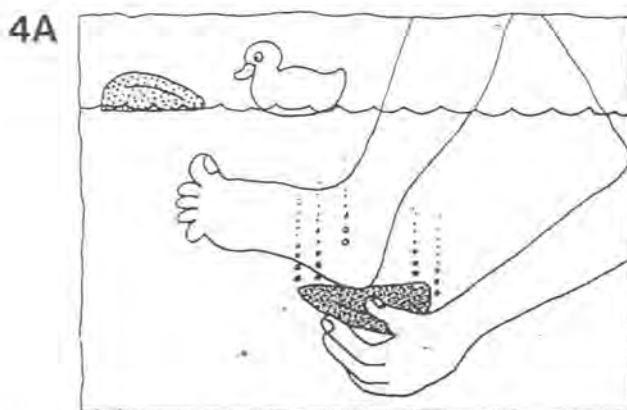
The following examples were selected as one of them represents a toilet, which links with 3A above, where children were asked to identify an oblique angle aerial view of a toilet, basically as anticipated evidence that children would have little or no difficulty identifying a toilet. However, the example contains drawings which are indistinct due to the stylistic treatment of the subject, e.g., the illustration of a drain and furrow with plants, drawn in dense line hatching, was anticipated to cause difficulty for the interviewees to recognize the content.



Cropping is intended to eliminate unnecessary detail and emphasize specific detail. (Benjamin, 1989:11.) The cropping or truncating figures/objects by an implied or actual picture frame has been considered to present difficulty to significantly pictorially illiterate viewers not familiar with this convention, who may, therefore, interpret the truncation literally. They may perceive the section/s of the cropped object/figure which lay unseen outside the picture frame to be literally separated or severed from that presented within the picture frame. Duncan et al. (1973:79), found that the children they tested, interpreted this convention with relative ease and understood that the figures in certain examples were cropped, and not dismembered animals or persons. From her pilot study Benjamin (1989:48) found that the children she interviewed preferred a more complete view of a figure, but generally had little difficulty interpreting the convention of cropping, and understood that the rest of the figure/animals lay outside the implied picture frame.

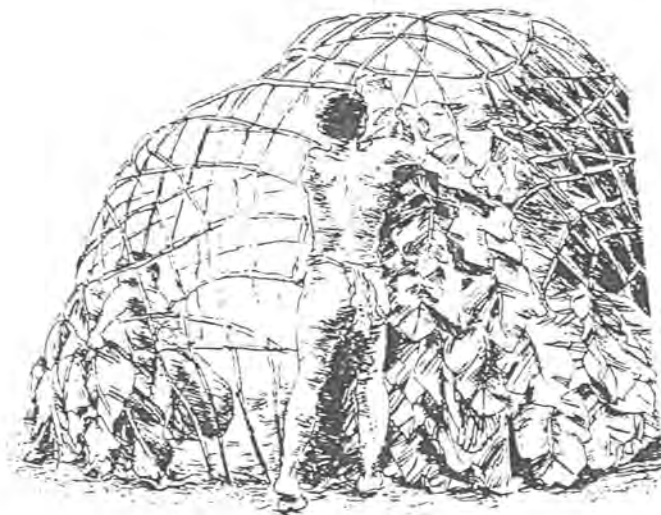
Another feature of cropping is the inclusion of an actual rather than implied picture frame which makes the fact that it is cropped easier to recognize for viewers relatively unfamiliar with this convention.

The children were asked to identify the content of the examples for subject recognition purposes. Example 4A was considered to be confusing with regard to the angle of view and awkward positioning of the limb, 4B was chosen as there was an implied - rather than actual - border; the background of sea and foreground of beach may also present difficulty in terms of recognition of the different visual clues.

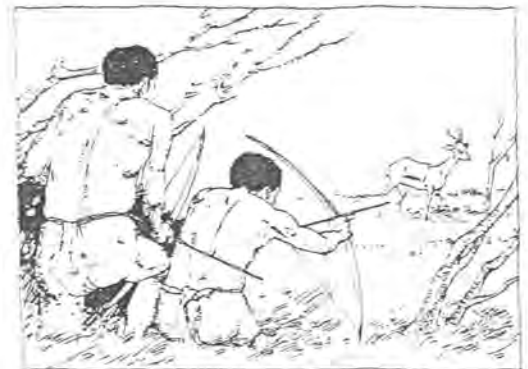


4D-E. Foreshortening

Foreshortening is a natural feature, present when a limb or section of an object is not in full view, but appears shorter, deformed or hidden, due to the particular angle of view and position of the figure/object. Duncan et al., found from their investigation that there were "... very few cases where foreshortening of limbs in a drawing was interpreted as a deformity" (Duncan et al., 1973:106.) Benjamin (1989:54) found that it was not assumed by anyone in the group [of interviewees] that these people [a side view of two men running - in the example] had amputated legs or a deformity." The following two examples, 4D - 4E, were selected.



4D



4E

5. Speech balloons, sequence of comic format and character continuity

Speech bubbles or balloons are used as graphic symbols to denote and separate the narrative from one speaker to that of another. Dreaming and thinking balloons are shaped like continuous outlines of soft, puffy clouds, with several small such balloons usually leading upwards from the subject's head to the main balloon containing the depicted thoughts or dream. Viewers need to understand this convention to interpret it correctly and meaningfully.

The comic format is used increasingly, with success, for educational and literacy purposes, both in textbooks and as a learning medium in its own right. Bahr and Rifkin (1992:23) found from their research into the 'River of our Dreams' comic produced and developed by the Story Teller

Group, that it "...enabled unproficient readers to engage with a far more complex narrative than they might otherwise have been able to." (in Blacqui re, 1995a:114.)

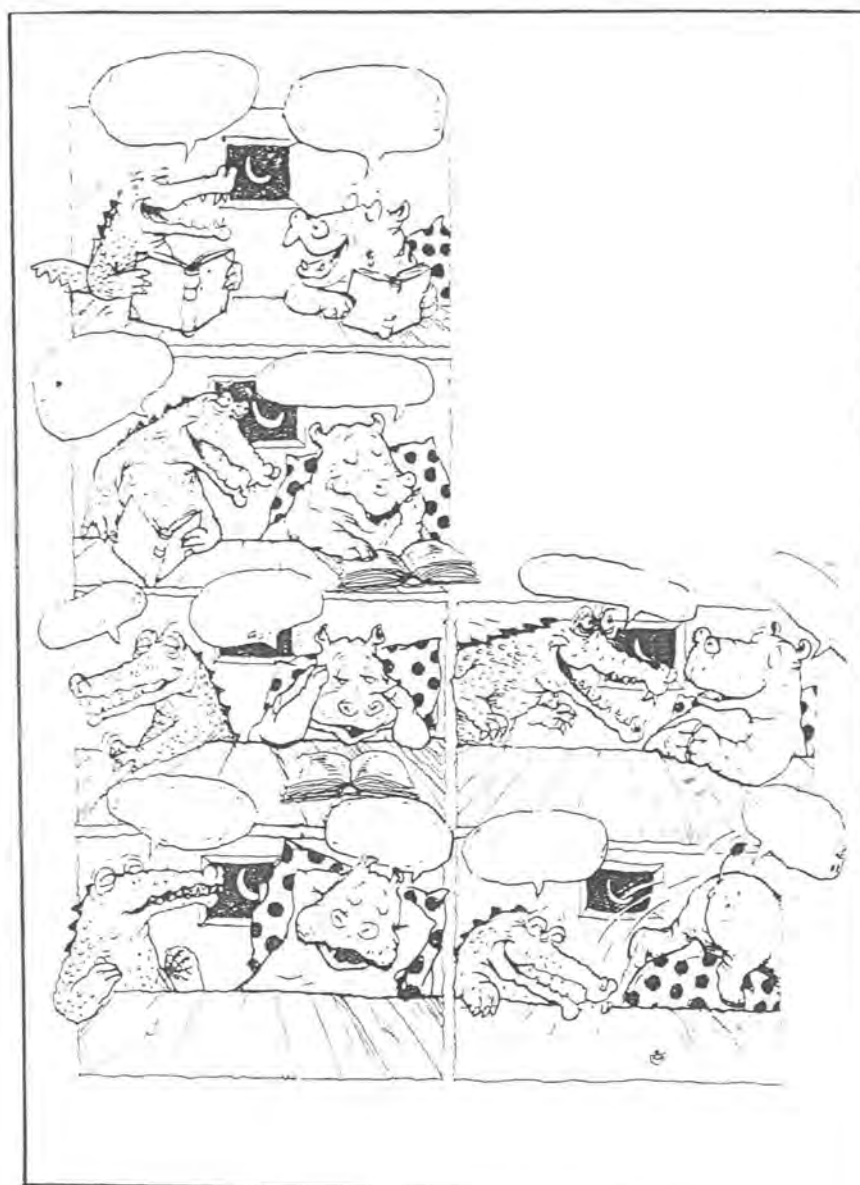
Wilkinson (n.d.:69) maintains that relating pictures to preceding and successive pictures like that of the comic strip format, is an acquired skill. According to him, a viewer who is unfamiliar with this convention, may not understand that a sequence is intended, and jump randomly from one picture to another in a picture story or comic format. Continuity of subject representation in successive frames is an important, as viewers may justifiably infer that different subjects are represented.

The first frame of a one or multiple tier comic strip layout usually begins with the top-left frame. In a single tier, the frame sequence is normally from left to right, unless otherwise indicated, and is therefore usually easily interpreted as such. Where multiple tiers are introduced in different format variations, an inexperienced viewer may not identify which tier of frames succeeds the other. An experienced reader may infer the sequence from the narrative, usually presented in speech bubbles/balloons or captions. It is therefore important that readers/viewers firstly understand this convention, and secondly that it is presented so that the direction can be easily inferred or seen.

Duncan et al. (1973:10), made mention of 'multi-stage pictorial art', but did not include it in their investigation.

Four examples (5A,B, C and E) of different variations of a comic format and an example (5D) where children had to group people into different pictures were selected. 5A, could be read either from top to bottom, then up to the top right frame, or from left to right for the lower two tiers of frames. The two columns of tiers in 5B could be read from top to bottom, or from left to right.

The questions asked were intended to establish if the interviewees understood that a sequence was intended and whether numbering and bordering are important for 'reading' the direction of a sequence where more than one tier is presented



5A



5B

5C

The first picture



The second picture



The third picture

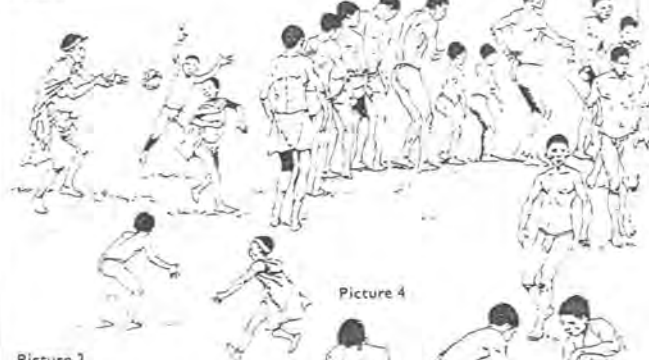


The last picture



5D

Picture 1



Picture 2



Picture 3



Picture 4

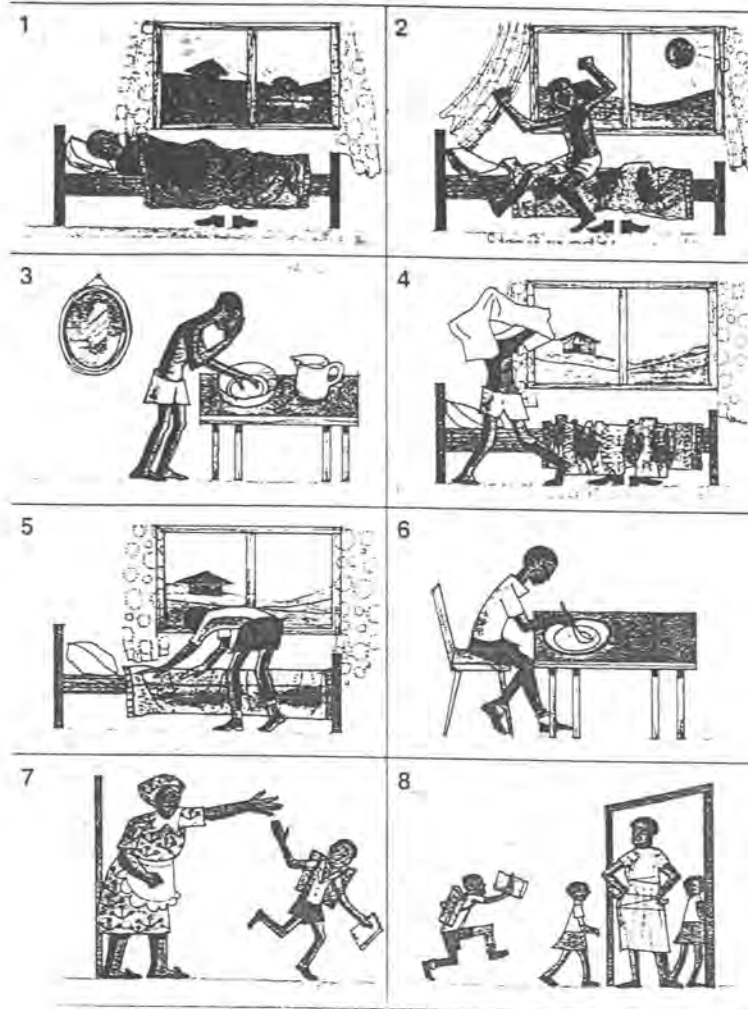


Picture 5



Picture 6





6. Western pictorial symbolism

Western pictorial conventions used for depicting various natural phenomena, emotions, thoughts, actions and ideas are symbols. Symbols are usually generated and used by specific cultural or sub-cultural group/s (see Chapters One and Two). Other groups when confronted with these symbols in pictures intended for didactic purposes, may recognise the object, its first order or denotative meaning, but not be familiar with - and therefore unable to interpret - the intended connotative or second-order meaning of the symbol. For example, a good person, behaviour or religious personage is symbolised by the depiction of a halo above their heads and/or angels wings growing from between their shoulder blades; a bad person, behaviour or evil personage is symbolised by horns growing out of the top of their head and/or a devil's tail preceding from their lower back.

Several examples (6A - 6P) of commonly used Western pictorial symbolism were selected to determine the interviewees' understanding of their connotative meanings. The interviewees were asked to identify the content or object and denotative meaning, where applicable, and their interpretation of the symbolic, connotative, meaning.

6A



6B



6D



6C



6E



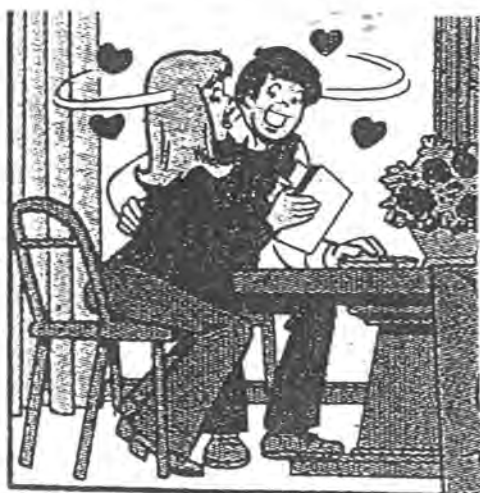
6F



6G



6H



6I



6J



6K



6L



6M



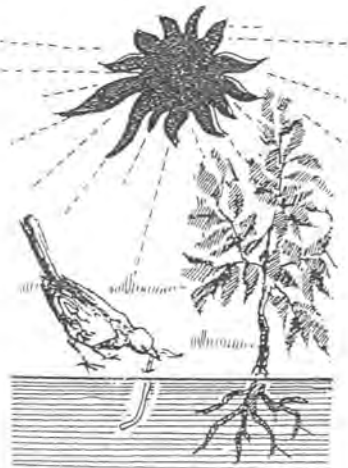
6N



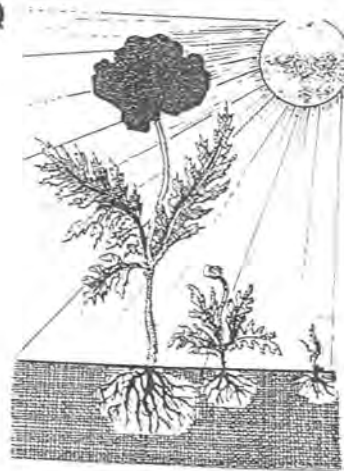
6O



6P



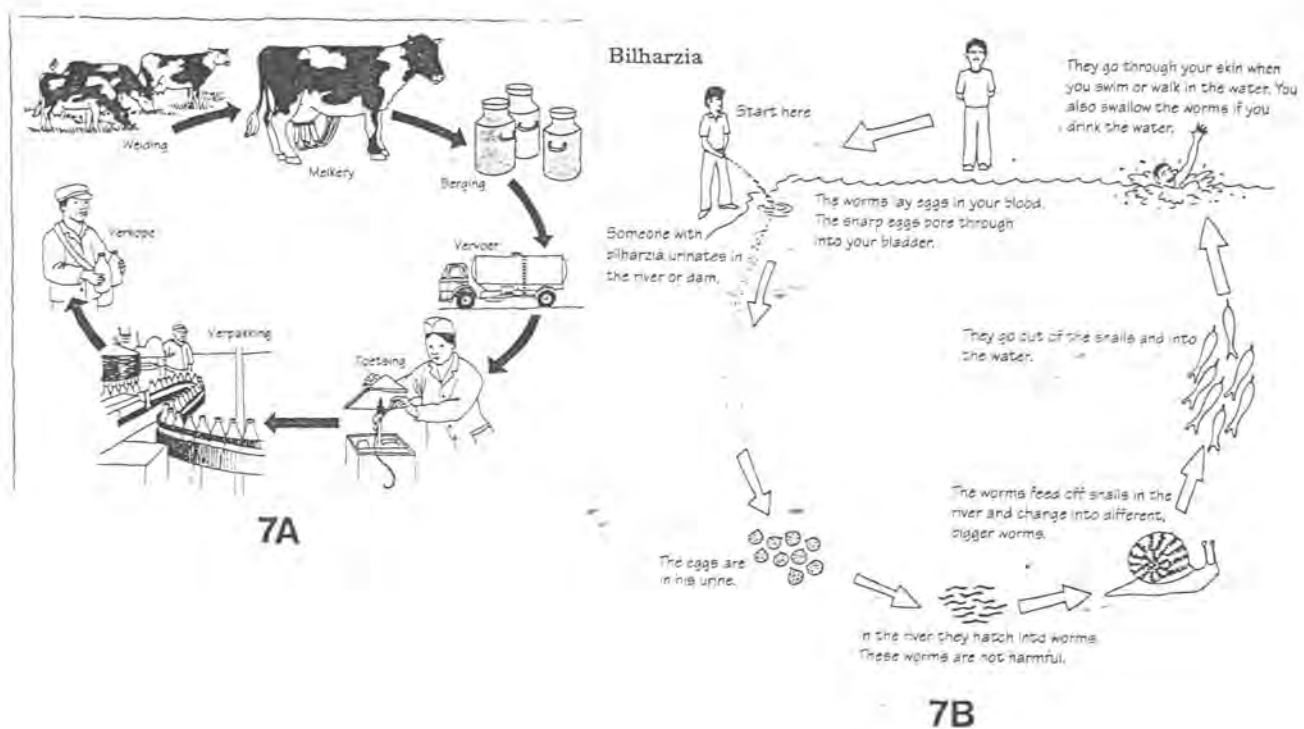
6Q



7A-B. Arrows and direction of arrows

An arrow is a graphic symbol indicating direction or directing attention to a specific feature or detail. (Benjamin, 1989:12.) Arrows are often used in flow charts to indicate the direction in which successive picture frames or words are leading, e.g., clockwise, anti-clockwise or left to right. If the arrow symbol is not understood, neither can the concept and direction of a flow chart be understood, as such it remains an arbitrary collection of certain images.

Two examples of arrows and flow charts were selected, which also contained examples of relative size. Interviewees were asked to identify the arrows and then the direction of the arrows.



8. Graphic separation line

Different types of graphic lines are used to denote a separation of pictures which are thematically linked, in this instance the line is a perpendicular slightly jagged line. This particular example is intended to demonstrate the relationship between two individuals and electricity and water.

Recognition of content

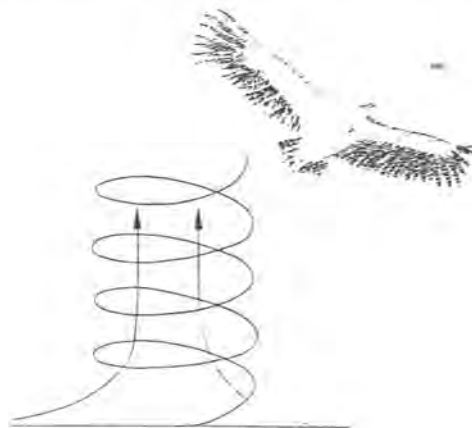
The interviewees were asked to identify the content of Example 8, to determine firstly, if they understood if any connection existed between the two figures. It was also anticipated that the

image on the left of electricity cooling towers may be difficult to recognize, due to the fact that it contains insufficient perceptual cues for identification.



9. Spiral

Lines and arrows can indicate any number of directions, by being twisted, curved, zig-zagged etc., to denote natural phenomena or an object's formation or movement. Formations of continuous line are used to suggest different types of movement. Example 9A of a spiral indicates thermals and a bird's flight pattern. Interviewees were asked to show how the bird was flying, to determine if they understood that this formation of line indicated spiral movement.

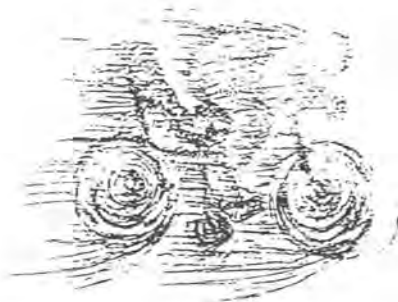


9A-G. Implied movement and graphic symbols

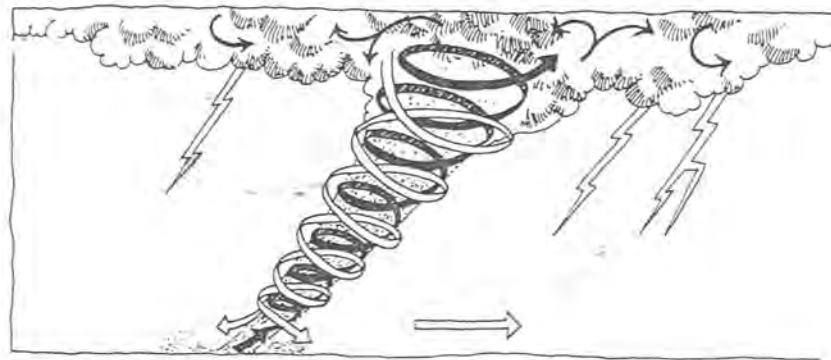
In a single picture, movement or motion can be expressed by visual cues like clouds of dust, shaking or shivering lines surrounding the object or person, multiple partially superimposed images, blurred outlines, arrows, a few or several lines - of varying length and amount - around or behind an object/person, denoting movement. Movement can be suggested in a sequential representation of several picture frames, of the subject moving across successive pictures, like stills from a film strip.

Duncan et al.(1973:116), found that the ability of subjects to interpret implied motion cues "... is correlated with [their] degree of [Western] acculturation ", with the urban black group performing better than the rural black group. Benjamin (1989:54) noted that the children she interviewed understood from the example of a man running, that he was running, but did not understand that the movement lines behind him were intended to represent "...that the man was running at great speed." She therefore deduced that, " They did not consider the implied motion cue as a possibility." (Ibid.:54.)

Two examples of lightning and a third example of lightning with several cues, were included with the following examples of different pictorial conventions for implied motion.



9A



9B



9C



9D



9E



9F



9G-9H

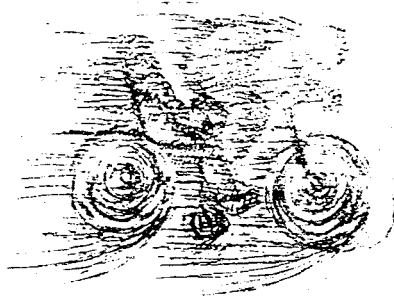
10. Section diagrams

A section diagram is a two-dimensional side-view representation of three-dimensional reality. It usually depicts that which is happening beneath the surface and/or within a certain person/object/scene and can also present that which is outwardly or superficially seen. (Wilkinson, n.d.:50.) It is a visual concept of a normally unseen reality, as such the viewer needs to understand the concept, linking that which the diagram depicts to their existing schemata of reference. Where the concept is unfamiliar it will require introduction and explanation.

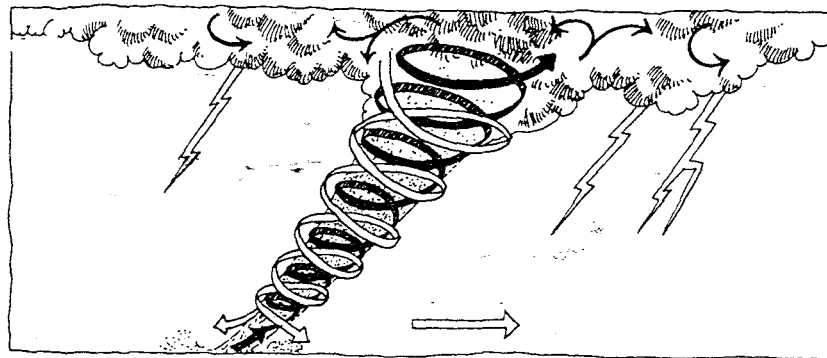
The following four examples of section diagrams were included. The first (10A) is a section diagram of pollution entering the sea. The second (10B) of different fishing nets was selected as it was anticipated that the underwater section which was left blank/white may difficult for some interviewees to understand as being representative of underwater. The third example (10C), of underground water, was selected as the ground portion was checked and could cause confusion as to its intended representation of ground or earth. Interviewees were also asked to name several of the items and features to determine their recognition of them, which could affect their overall understanding of the diagram's intended representation.

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9A



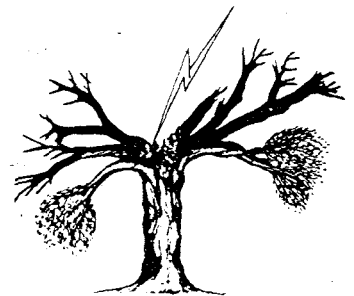
9B



9C



9D



9E



9F

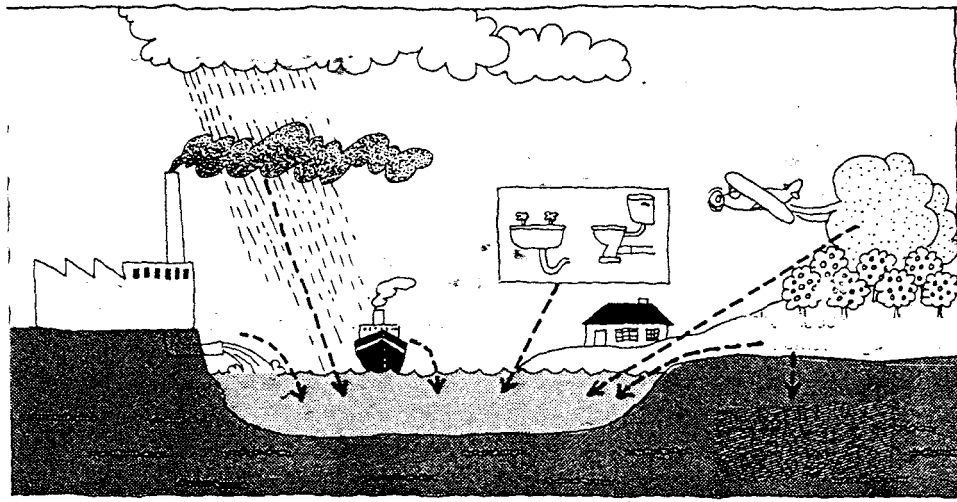


9G-9H

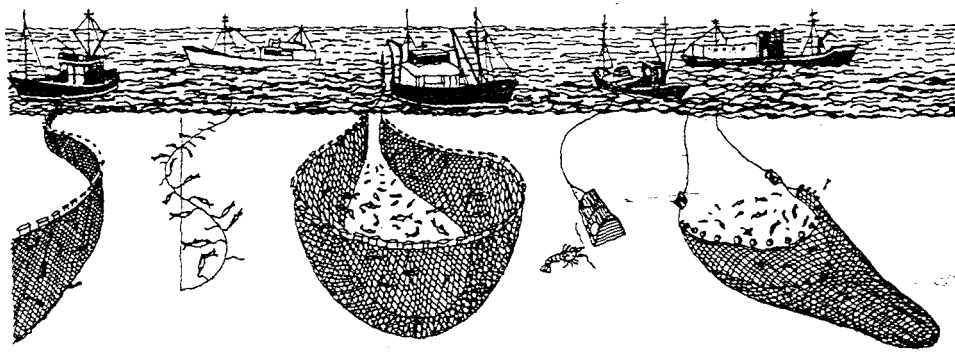
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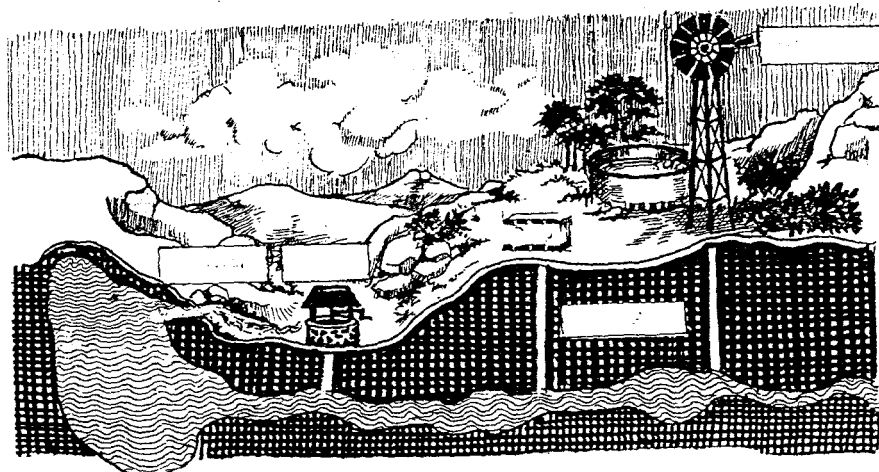
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10A



10B



10C



10D

11A-B Grainy photographs

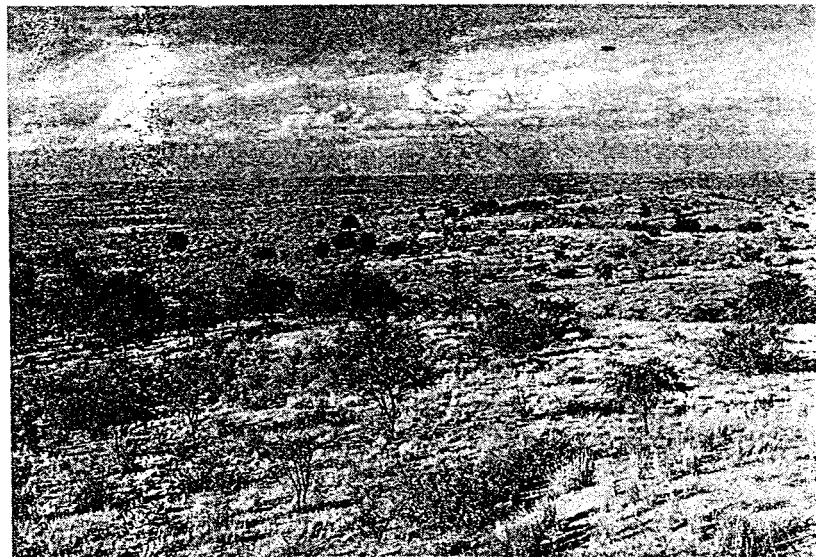
Photographs could be considered to be the most realistic two-dimensional representation of an object or situation for educational illustration, as they provide an accurate and realistic image. However, photographs may contain irrelevant, distracting or excessive detail - although cropping and/or block-out can minimise these aspects. According to Blacqui re (1995a:98), photographs should reproduce well in the final copy; poorly composed photographs, with grainy texture, and no contrast " ... are cut into the text, and come out as dull grey blocks of almost solid ink in the final product." A clear well executed drawing of the main relevant features of the photograph could be more effective (Wilkinson, n.d.:45) and would eliminate the pitfalls of photographic print reproduction. (Blacqui re, 1995a:98.)

The following two photographs (11A and 11B) were considered to be examples of somewhat grainy black and white photographs, which did not appear to reproduce well and provide the detail necessary for the intended meaning. The first, 11A, had the caption: "In the rainy parts of South Africa, there are lots of green trees and bushes. There is also a lot of grass for the animals to eat." The second was presented with the caption, "In this picture you can see that the land in Botswana is very dry. There is very little water for the cattle to drink and very little grass for the cattle to eat." The photographs were presented in the interview without any caption, to

determine whether the interviewees could recognize them, the question's asked were, 'Which of these two photographs (11A and 11B) is of a place with a lot of green trees and bushes?', and, 'Which of these two photographs is of a hot and dry place?'.



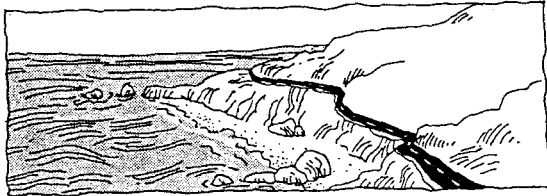
11A



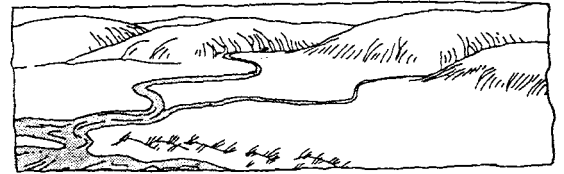
11B

12. Geographical diagrams and cross-sections of mountains

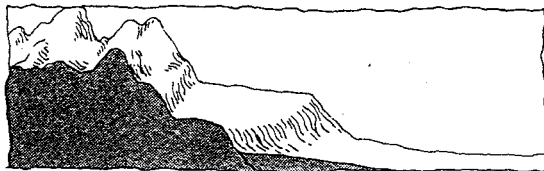
Examples 12A -12 H of rivers, mountains and cross-sections of plateaus and escarpments were selected to determine whether the interviewees understood them as such. It was anticipated that 12B and 12D could cause difficulty due to the over-simplified nature of the diagram as it contains little supportive visual information to aid recognition. Examples 12C, 12E, 12F, 12G and 12H also contain little supportive information to explain the concept of a cross-section of a landform.



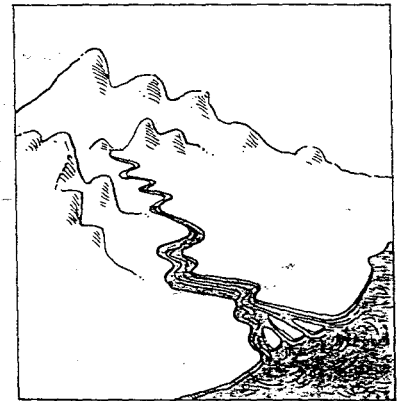
12A



12B



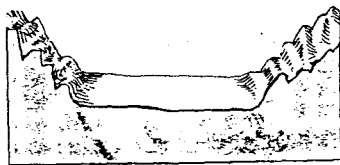
12C



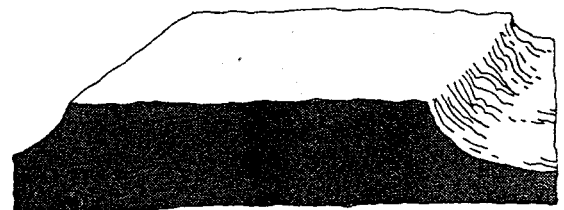
12D



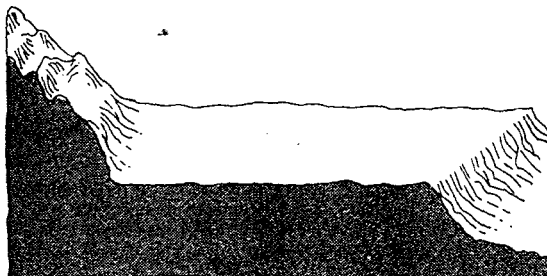
12E



12F



12G

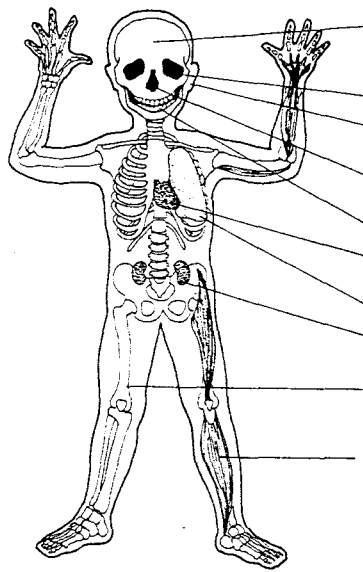


12H

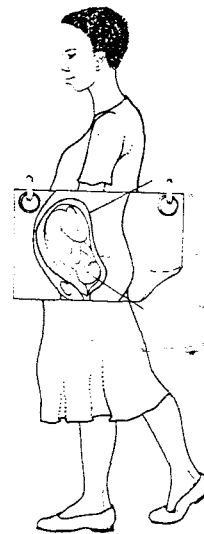
13. X-ray internal Views

The x-ray transparent view shows a view that would not naturally be seen, e.g., an x-ray view of the human figure which usually shows an outline drawing of a human figure with the relevant internal organs and physiological features, "As the technique presupposes an understanding of how x-rays work, it may be incomprehensible to the viewer." (Benjamin, 1989:12.) Benjamin discussed this aspect briefly but did not include it in her investigation.

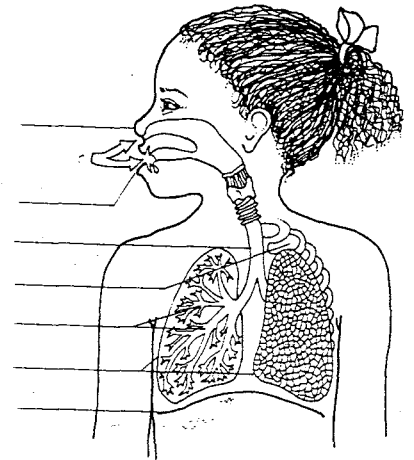
The following diagrams of a human figure, a pregnant woman and a respiratory system provide different x-ray internal views of the human figure.



13A



13B



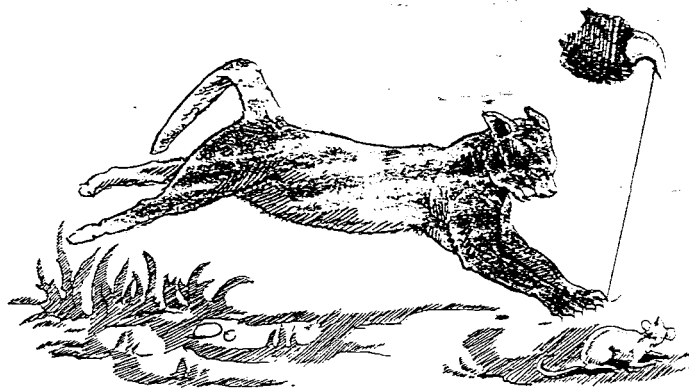
13C

14. Magnification and reduction

In magnification, objects are uniformly enlarged to much larger than their actual size and can be difficult to recognize due to their excessive proportions (Benjamin, 1989:12), especially where no scale item familiar to the users is included. For example, the classic and often quoted anecdote: A medical field worker showed African villagers a magnified poster drawing of a mosquito, whereupon the workers responded that the field worker should not be concerned as they did not have such large mosquitoes in their area. Another factor pertaining to the size conceptualization of magnified subjects, is that viewers may be unfamiliar with the object and therefore cannot infer its actual size without a familiar scale item, e.g., an enlarged picture of a tiny crustacean without a 10c piece or matchstick alongside it. Viewers would also need to understand that the scale item is intended to provide a relative size conceptualization of the subject.

Reduction is the reverse of magnification and the same principle of including unfamiliar objects without a familiar scale item, applies. For instance, a person who has not seen pictures or footage of a dinosaur may have no conception of their monumental size, but if one were to include a scaled picture of a car alongside it, this could provide a basis for size conceptualization.

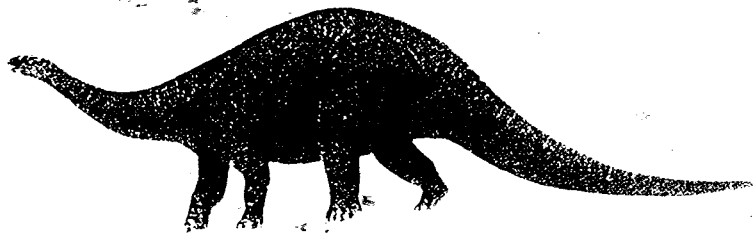
Example 14A shows a magnified view of a cat's claw with a line denoting the connection between the cat and the claw. Examples 14B, C and D of certain dinosaurs were chosen as examples of 'reduction'. Some interviewees may not be completely familiar with the subject and therefore may have no conception of their enormous size. The use of a familiar scale item, in this instance a car, to provide the interviewee with an indication of the actual size of the dinosaur, was included to establish whether this facilitated their conceptualization of actual size. Example 14D shows a dinosaur with a car as scale item beneath, while 14E shows a dinosaur with a car as scale item alongside it on the same picture plane. From these two figures it could be ascertained whether an item included for scale purposes facilitates understanding when it is placed beneath or next to the object on the same plane.



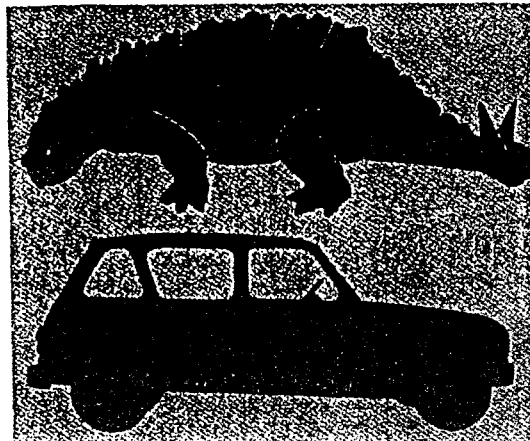
14A



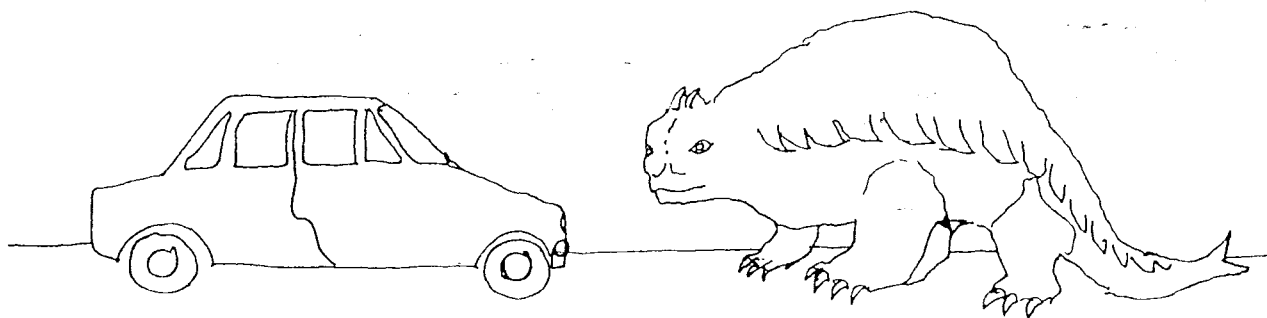
14B



14C



14D



14E

15. Overlapping/ Superimposition

Overlapping or superimposition is a pictorial feature often used in conjunction with relative size to depict depth in the picture plane. An item is only partially seen, as the rest of the item is 'overlapped' by the object closer to the viewer in the picture plane. This feature could cause a literal visual interpretation on behalf of viewers, who perceive the overlapping objects being somehow attached to one another, or the partially obscured object as being deformed or incomplete.

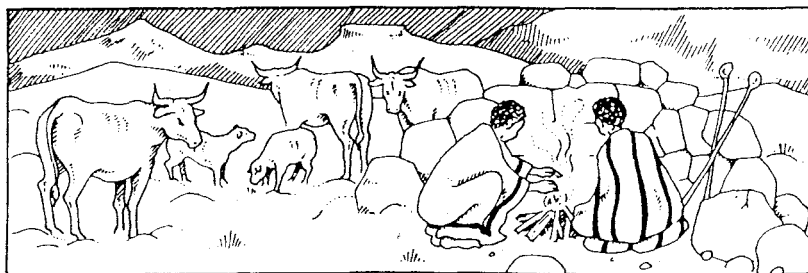
In the pilot study conducted by Benjamin (1989:49-52), one of the children interviewed interpreted a picture of two slightly overlapped heads, as being joined together at the head like those of the Baragwanath siamese twins - which was topical at the time of testing.

Examples 15A and 15B contain images of overlapping or superimposition. In 15A the boy and girl on the right-hand side stand with the boy's head slightly overlapping that of the girls. The relative size of their heads gives a clear indication that the boy is not standing next to the girl but rather in front of her towards the viewer. Example 15B, is a straightforward drawing of superimposition of sheep, cows and rocks.

15A



15B



SECTION 3:

Object Recognition - Living and Non-living Items

This section is designed to attempt to establish the interviewee's familiarity with objects/animals/items which are presented in educational textbooks and story books.

Cross cultural research by Kennedy and Deregowski (in Cassidy and Knowlton, n.d.:67-90, cited in Burnett, 1989:13) concluded that the recognition of pictorially depicted objects is relatively straightforward, and merely requires that the objects be familiar to the 'reader' and are represented in a suitable pictorial style. There are, nonetheless, factors which have been found to aid or hinder recognition of objects depicted pictorially. Objects have one or more 'identity cues' which make it possible to recognize and identify the object in a picture, therefore there is often a limit as to how much of an image of an object can be simplified. (Burnett, 1989:13.)

Pit-Corder (1973:50) mentions that there may be subjects which are totally unknown to the learner and therefore "useless" as visual information to convey meaning, e.g., snow and ice-skating in many parts of Africa - although he adds that it may be less of a current difficulty due to the increasing influence of mass media and communication. Wilkinson (n.d.:67) adds that, "a subject relevant to the audience is more likely to be understood than one which is of casual interest."

Accurate and excessive detail

The accurate and salient use of realistic detail and cues facilitates the viewer's recognition of picture content or objects. The converse also exists; inaccurate or excessive detail and cues may cause distraction and/or confusion, consequently the intended representation or meaning is misunderstood. For example, a diagram of a goat was used in a test by Fuselgang with a community in Kenya. The viewers identified it as a cow instead of a goat. Fuselgang later discovered that this perception was due to the inclusion of a tail which turned downwards and not upwards like that of a normal goat. (in Wilkinson, n.d.:68.) Dwyer (1970:245-6) established from a series of studies he conducted to determine the effectiveness of learning from certain combinations of visual styles that " ... those illustrations containing relatively small amounts of realistic detail were most effective ... additional detail ... distracted student attention from important information." It is therefore important that visual imagery for didactic purposes be easily recognized, especially when it is intended for viewers who are not familiar with and continually exposed to a wide variety of visual images.

A great deal of examples were, therefore, selected for inclusion into this section. Some examples were repeated in different positions or styles, to determine if these variables influenced interpretation. Objects were arranged into different page categories not for any thematic reason, but to facilitate later tabulation of the data. Each example was pointed to, and the interviewees asked to identify them. In those instances where the children appeared to attempt to, but were unable to, identify the item in either their mother tongue, second or third language - a brief description was requested from them; e.g., Where does it live?, Where does it come from?, as they may have recognized the item but were momentarily, or otherwise, unable to name it.

The photographs on Page 12 of this section, were selected as they depict different geographical features to determine how the interviewees would interpret these photographs. It was anticipated that photographs B and C may present difficulty with interpretation of intended representation, due to the fact that the photographs are dark and somewhat grainy and the necessary detail is slightly unclear.

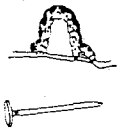
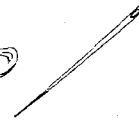
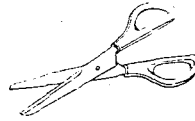
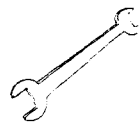
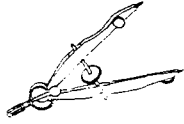
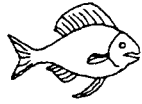
Literal interpretation of pictures

Although it is conceivable that viewers unfamiliar with certain Western pictorial and stylistic conventions could interpret them literally, e.g., relative size, overlapping and truncation. It is more likely that most black primary-school children would interpret certain stylistic techniques like those of cartoon or caricature literally, as well as certain subject matter and content.

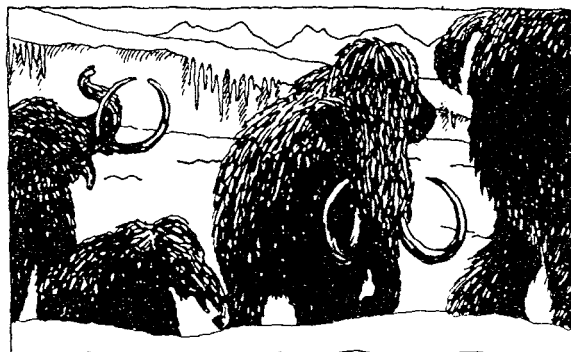
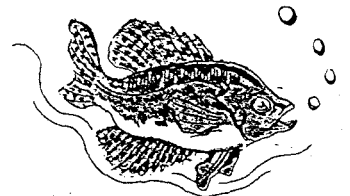
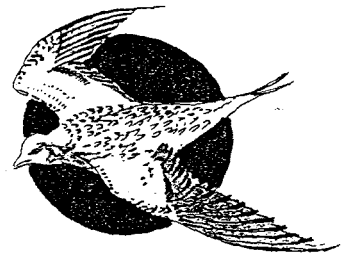
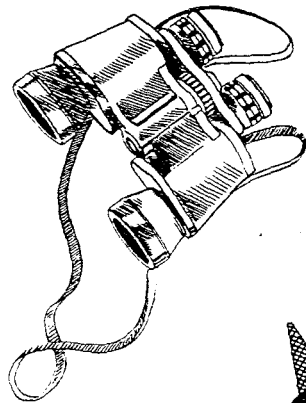
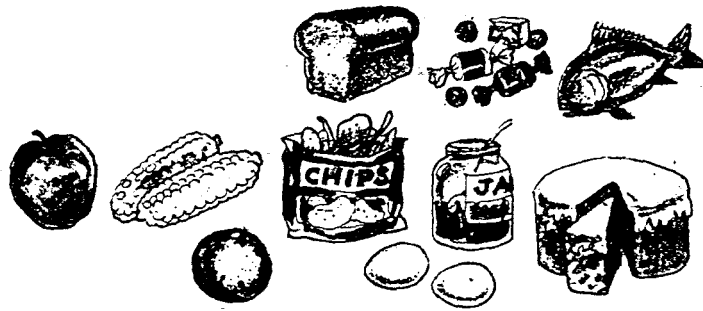
Western illustrative and artistic styles are learnt through a process of continual exposure from a young age. It is easily accepted, therefore, by Western viewers that some stylistic conventions are often inconsistent with reality, e.g., excessive stylization, cartoons or caricatures which are distorted to create a certain culturally conditioned response from the viewer. Viewers unfamiliar with these stylistic conventions, may, therefore, interpret them with an untrained perceptual freshness or naivete.

A literal interpretation of pictorial content or subject matter could include semantic interpretation, but in this instance, refers mainly to the associations the viewer brings to the content from their schemata of reference, e.g., Duncan (1962 in Duncan et al., 1973:9) found that "... details of musculature in the drawings of a human torso were seen as incisions made by the witch-doctor" (presumably by African subjects, although it is not mentioned). A photograph of a symphony conductor, taken from a low angle, standing with his arms outstretched was interpreted by an African subject as Christ being crucified. (Bloomer, 1976:58.)

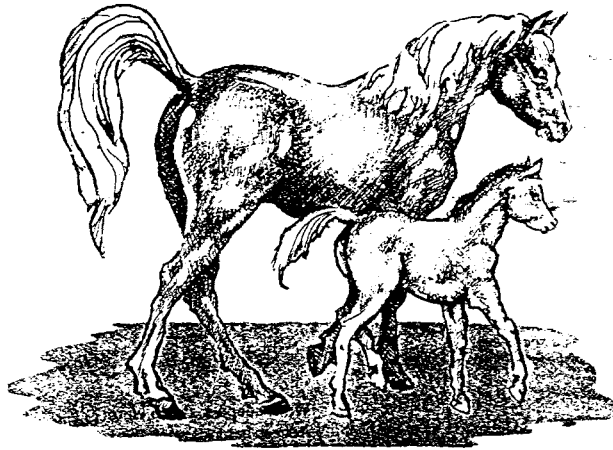
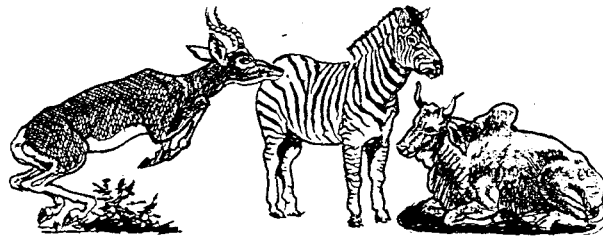
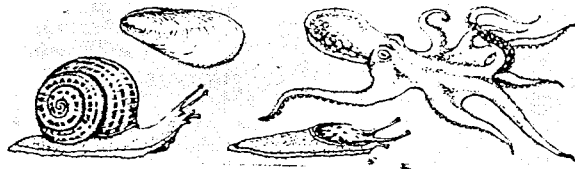
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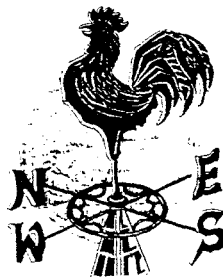
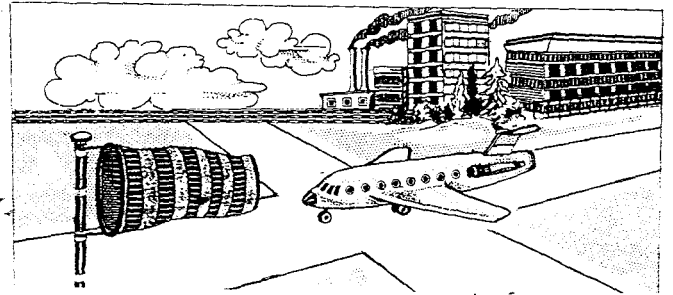
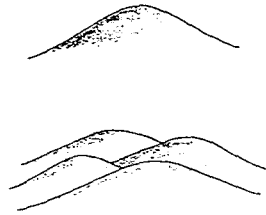
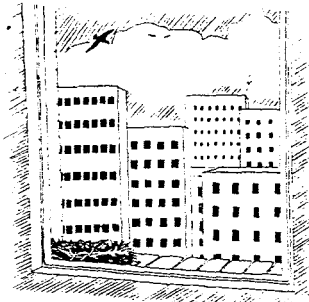
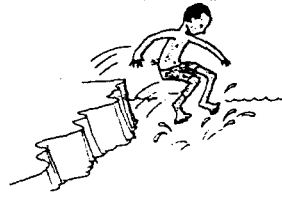
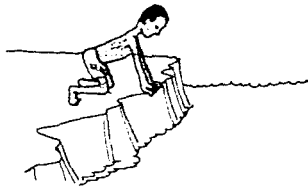
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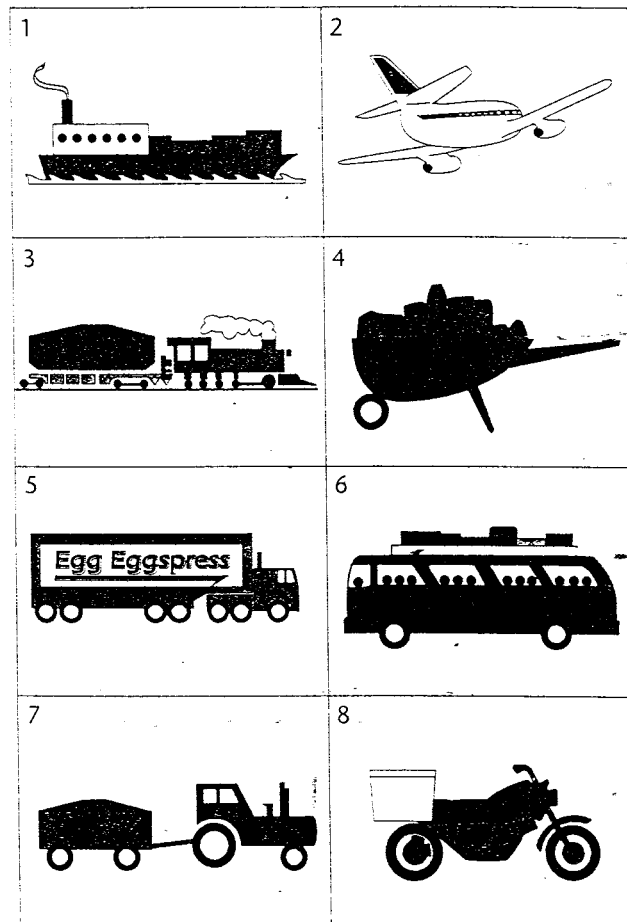
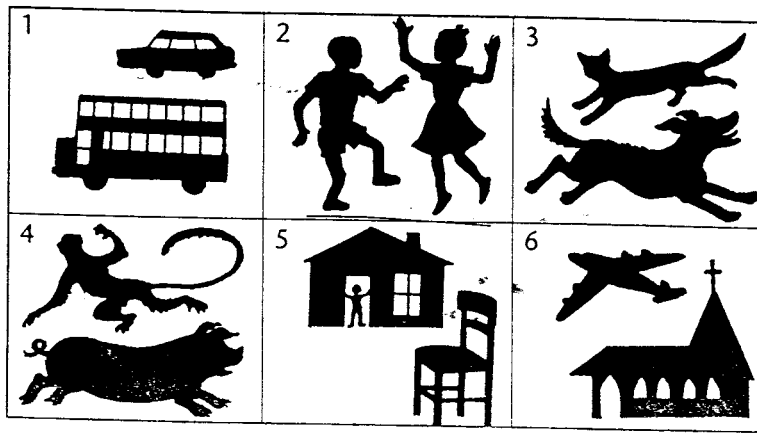


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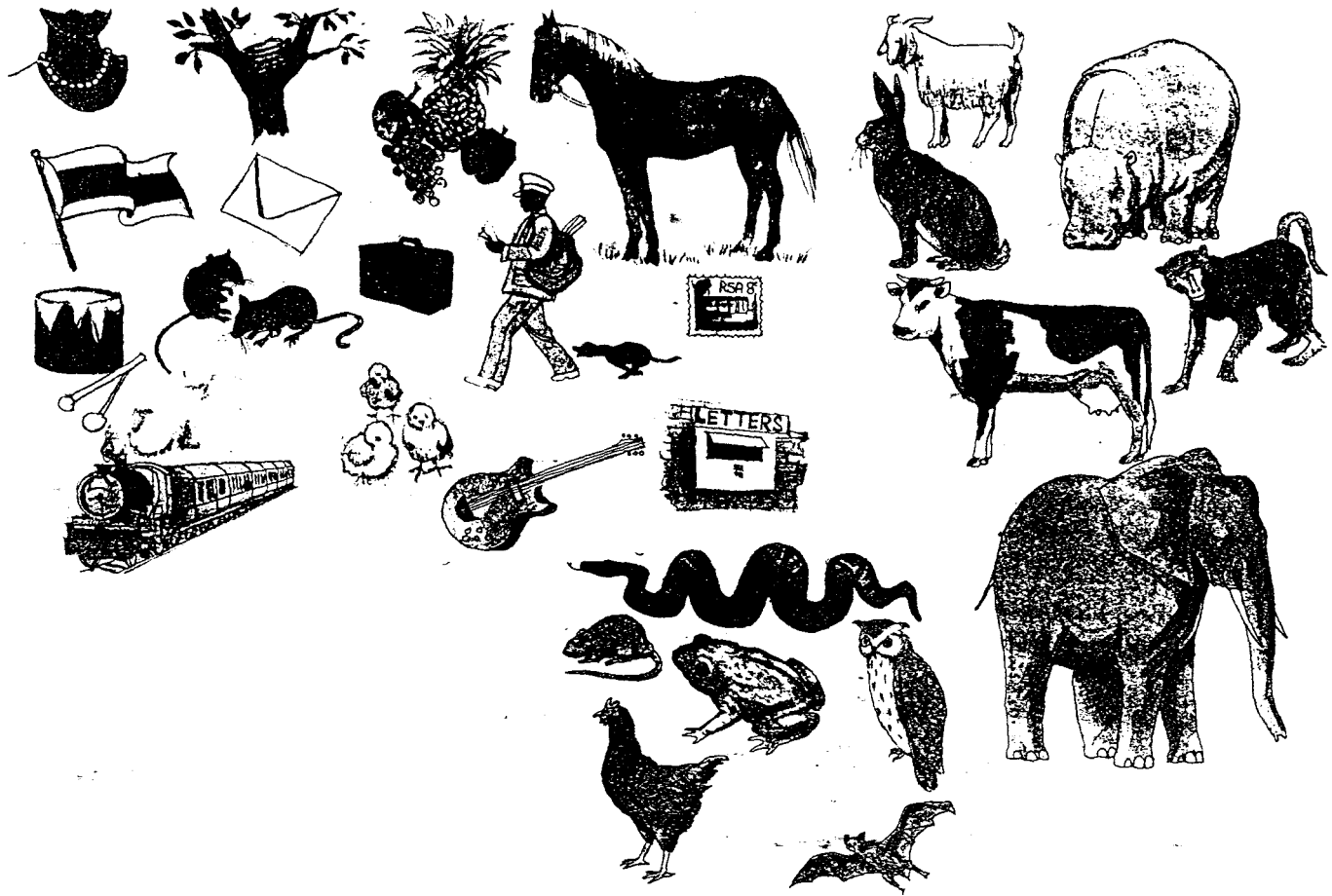


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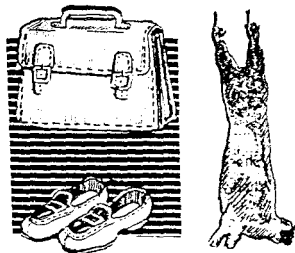




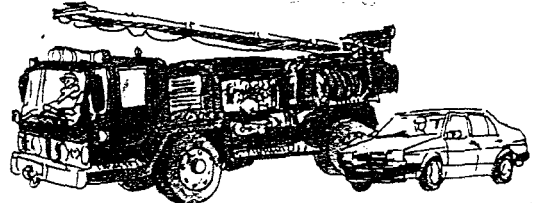
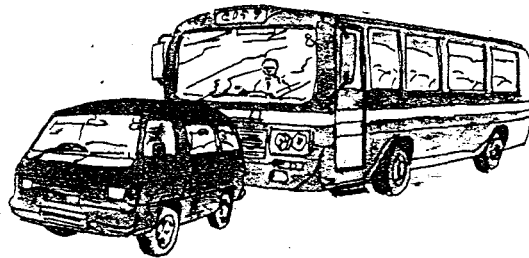
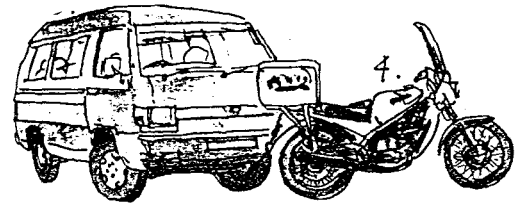
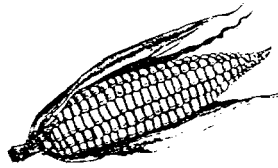
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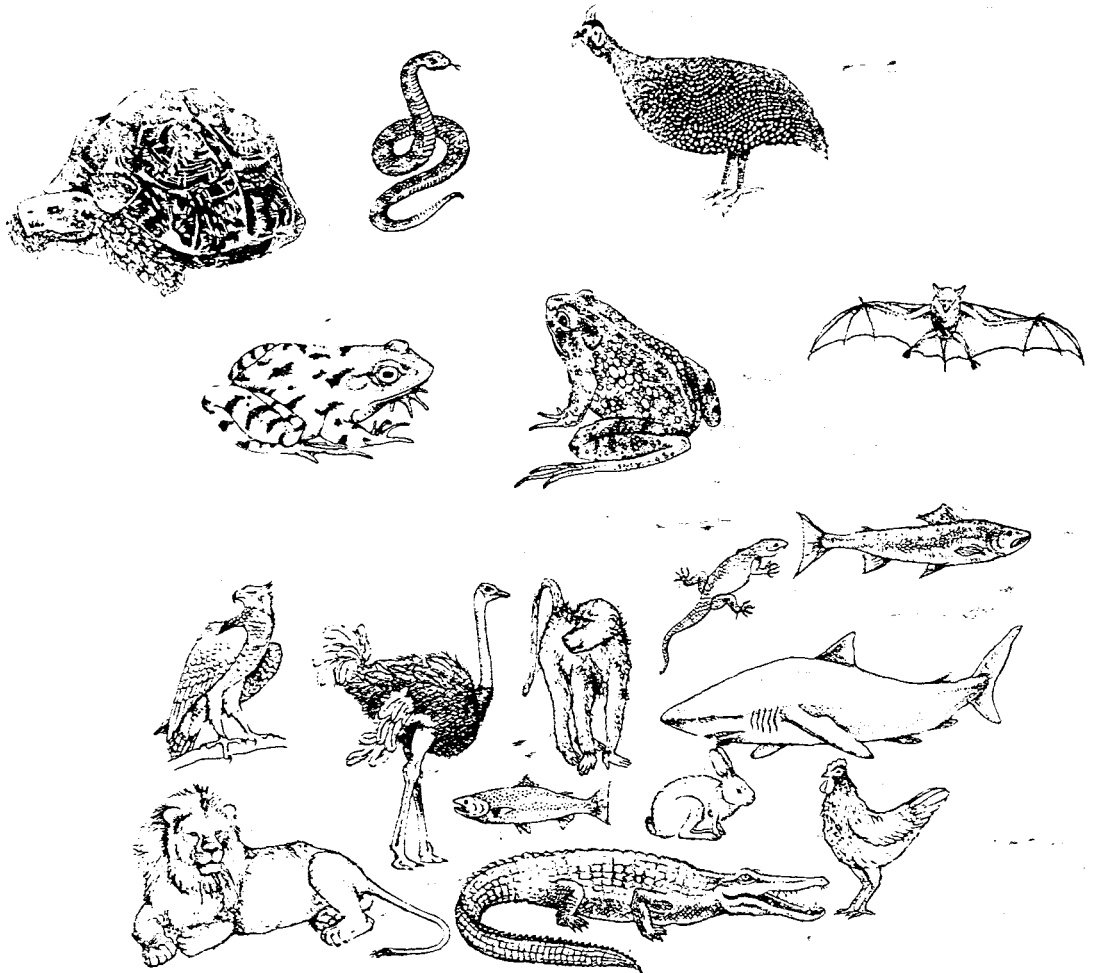
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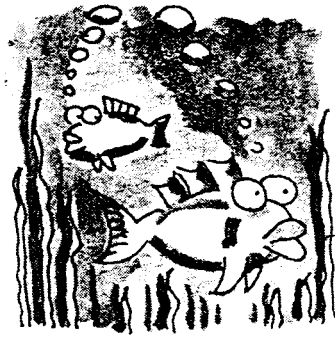


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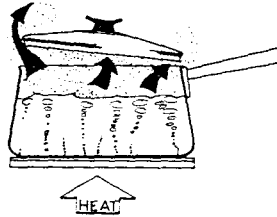
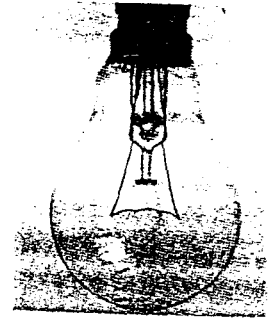
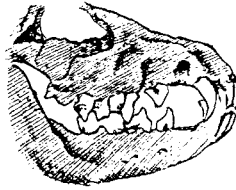
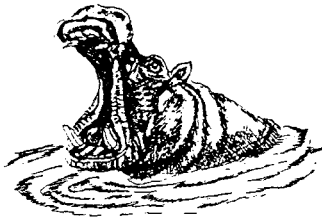


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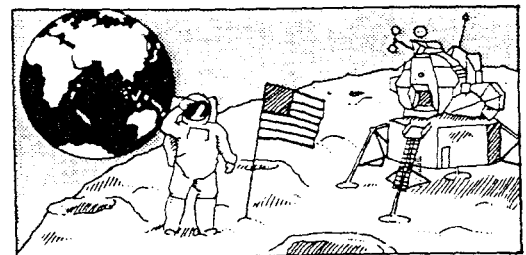
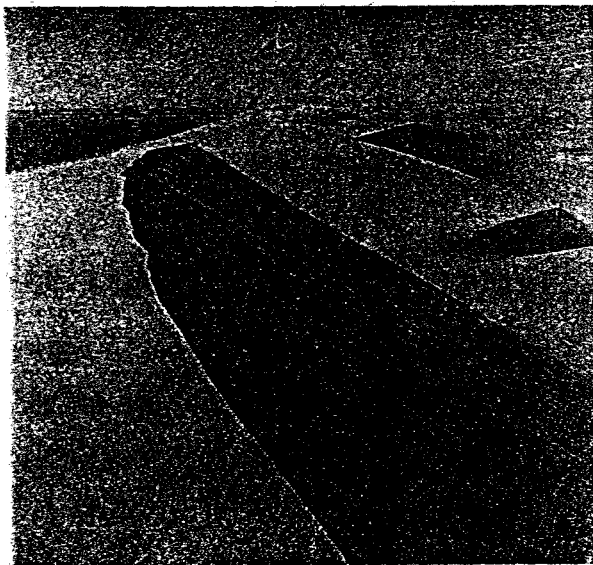
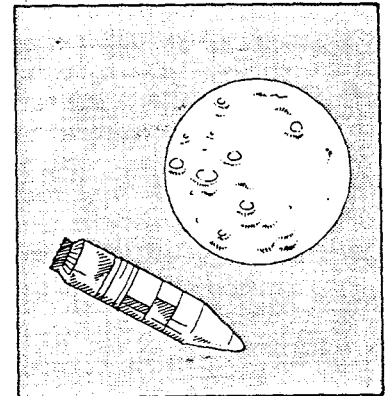
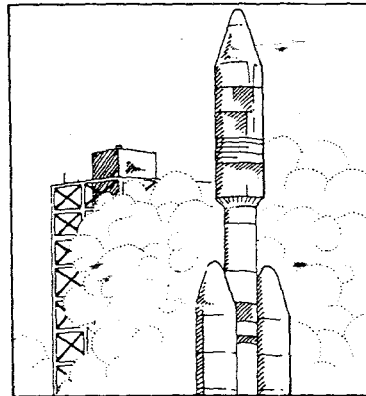


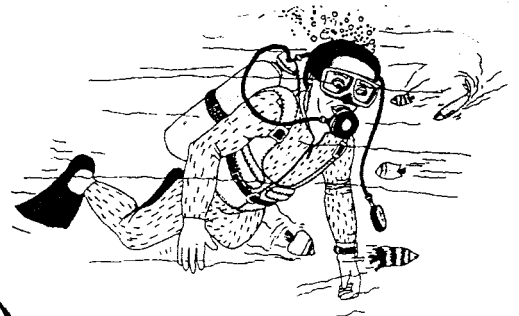
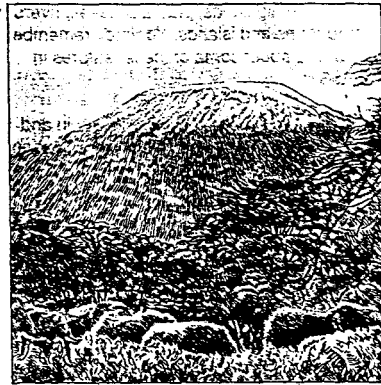
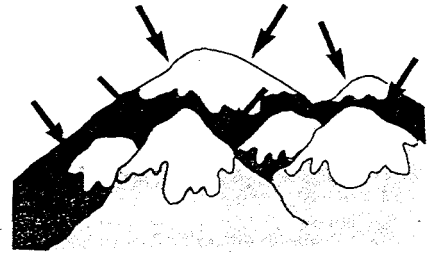
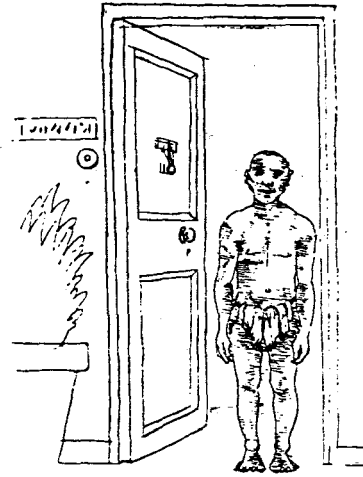
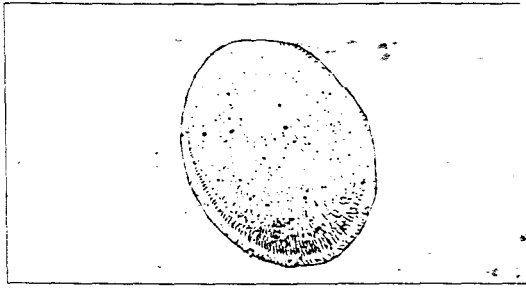


11.



12.







SECTION 4:

Stylistic Preferences and Interpretation

Illustrations can be executed in any number of different styles. The style used may influence people's preference for one picture over another, as well as affect recognition and understanding. The most appropriate style varies according to the target audience's familiarity with and liking of that style. (Wilkinson, n.d.:69,51.) Morgan and Welton (1986:51) observe that, more perceptual attention is given to messages or stimuli (styles), that are preferred. If the message or stimulus is disliked the perceptive response is likely to be hostile.

Generally, the style of illustration in educational textbooks for primary-school children tends toward varying degrees of realism. The intention being that the visual message should be easily decoded and the intended meaning constructed from the visual and written text. (Blacqui re, 1995a:97.)

A publishing editor, in response to the postal Research Questionnaire expressed her view that children needed a "fuller and richer" exposure to a variety of (styles and) illustrations in school materials, which she considered more important than merely limiting text pictures to what is likely to be "familiar and unambiguous". If only one particular style were used, this could preclude the child from exposure to a variety of styles and thereby making choices pertaining to their individual preference/s.

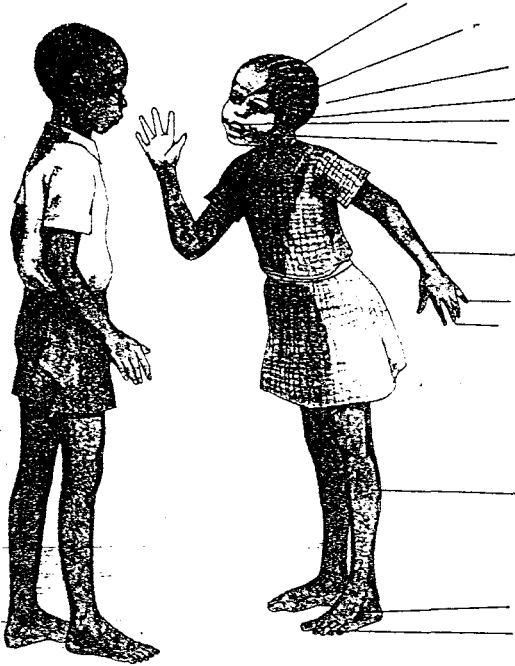
However, given the dearth of formal educational resources in the socio-cultural environments of many black school pupils, it is crucial that the choice of styles for educational visual texts are appropriate for the intended learning context. Styles should facilitate learning by being readily recognized and understood, i.e., a cartoon style may not be appropriate for scientific diagrams but may be suitable for illustrating narrative text. Similarly, a very dense, excessively detailed line-hatching style may not be appropriate when subject matter is presented which requires ready identification and recognition of relevant features.

1A-1C. Preference for different styles of realistic illustration

Regarding children's preferences for certain styles, Duncan et al. (1973:95), found that the realistic figure was, "... easily the most popular for all groups" and, interestingly, that the realistic style was slightly less popular with the white group than the black group. Benjamin's (1989:49) findings bear out those by Duncan, she too discovered that the six children she interviewed preferred the more realistic pictures to those of stylized line drawings.

Three images of children were selected. 1A is a dark toned line and wash illustration of a black boy and girl who are wearing simple clothes and no shoes. 1B is a line and wash illustration, of a black boy and

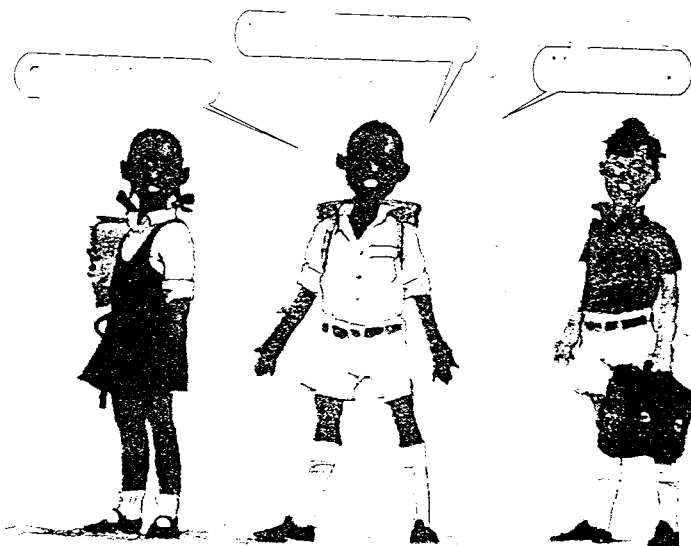
girl dressed in neat, pretty clothes with shoes and socks, who are lighter in tone in comparison to 1A, although the shadow effect is quite dark, 1C is a wash illustration of a black boy and girl and a white boy dressed in school clothes.



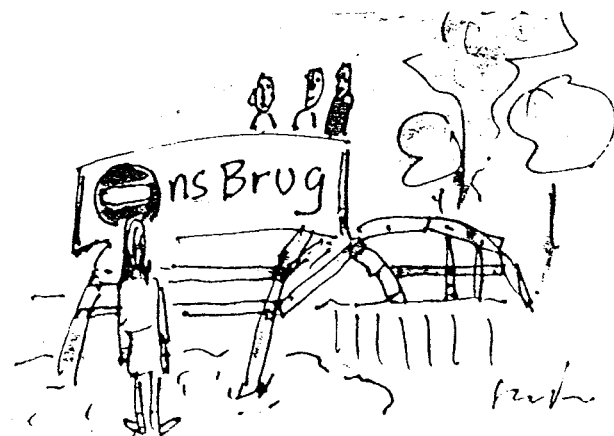
1A



1B



1C



1D

2A - 2C. Line hatching

Line hatching is the stylistic definition given to the use of successive lines, of varying widths, lengths, delicacy and strength, to render volume and tone.

Tomaselli and Tomaselli (1984:101-3), found from their study surveying the responses of township residents in an Eastern Cape township community to medical health posters, that some of the survey participants found characters in certain drawings to be 'ugly'. This was attributed by the researchers to the drawing style which overused texture and shadow in an attempt to create an impression of a black person, which the researchers considered to be, " ... too lined and scratchy".

Of the following three examples of line hatching, 2A was selected because the picture content may not be liked by the interviewees, whereas they may prefer the picture content of 2B and/or 2C. This would indicate whether there was a distinction between their preference for or dislike of this style, or if their response was influenced by the picture content.



2A



2B



2C

3A-3B. Silhouette style

The silhouette or cut out style is, as the name suggests, a silhouette of a subject which is cut out on the outline. The silhouetted subject is usually reproduced in a single block of colour, often black, on a white or single colour background. As such, the silhouette style is relatively easy to produce and suitable for isolated figures and straightforward actions. Due to the apparent simplicity of the style and because little fine detail is included, it is important that sufficient relevant features or cues of the subject are included to facilitate recognition. As much detail is excluded, i.e., the perceptual valence attached to eyes and mouths - the style could perhaps be less 'emotionally' appealing to viewers. Duncan et al. (1973:95), however, found that the silhouette style was the most appealing to the black group, especially the Zulu sample, whilst of the two groups - black and white - it held the least appeal for the white group.

The following two examples of a silhouette cut-out style were chosen. It was anticipated that the interviewees would easily recognize the salient features of this mode of illustration. 3A is a picture of a rabbit, while 3B's content was somewhat more menacing, and therefore affect the children's response to the 'style' of the picture.



3A



3B

4A-4B. Stylization and realism

An extreme version of stylistic representation is the so-called 'stick figure' style. Duncan et al. (1973:100), found that the stylized 'stick figure' representation was the least popular amongst both the white and black groups they tested. Probably because the style has so little emotional appeal, and is therefore difficult for audiences to relate to. (Wilkinson, n.d.:70.) As already mentioned earlier, Benjamin (1989:49) found that the very stylized line drawing illustration was far less appealing to the children interviewed than the more realistic illustration.

The following two examples 4A and 4B were selected to determine which style the interviewees preferred. Example 4A is an example of a stylized cartoon like depiction of a mother and children with food, while 4B is a more naturalistic realistic style of a family eating and preparing a meal. The examples shown were well reproduced colour laser copies of the original.

4A



4B



5A-5B. Photograph and realism

Generally speaking, a photograph can be regarded as the most uncompromised form of realism. If, as found by Duncan et al., (1973) and Benjamin (1989) that black children prefer realistic illustrations, it is therefore, likely that they would then prefer a clear photograph to a realistic illustration of similar subject matter. To determine this the following two examples were chosen.



5A



5B

6A-6B. Crisp realistic style and sketchy wash realistic style

Two images of school children were selected, the first (6A) is rendered in a crisp clear realistic style with clear details and clean uninterrupted surfaces of a classroom in the background, the other (6B) is in a sketchy wash realistic style, the background outdoor detail is treated with patchy washes.

6A



6B



7A-7B.

Cartoonish caricature figure and realistic figure

Cartoons utilize different styles and brands of humour to convey a message. Typically cartoons are rendered in line-drawing with added captions or speech balloons/bubbles, with an economic salient use of detail. Human figures and features are often distorted or exaggerated to make them amusing. Wilkinson (n.d.:51) cautions that, that which one culture may find humorous is not necessarily deemed humorous by another group, and advises that it is important to attempt to establish that which the intended viewers find amusing, and which styles they prefer and understand to this end. Duncan et al. (1973:95) discovered that the cartoon figure was significantly more popular with the White group than with the Black groups, and was more popular with the urban Black group than the rural Black group.

To establish whether the children generally liked and or appreciated a typical western cartoonish caricature style versus a more realistic rendition of the same subject, the following two pictures of soccer players were selected.



7A



7B

CHAPTER THREE: ENDNOTES

33. Powney and Watts (1987:123) mention that, "It may be desirable to interview everyone directly involved with a project, but more frequently it is necessary to take only a sample of people. Bearing in mind the costs in time and money, the sample should be as small as is consistent with obtaining valid data. The final list of interviewees should give an appropriate representation of the range of views relevant to the purpose of the research.
34. The interviews with the publishers were conducted in their respective offices. Two of the interviews with the illustrators were conducted in their homes, the third was interviewed in a coffee-shop.
35. The seventh interview was conducted to obtain information concerning the history of educational textbook publishing in South Africa, it was not transcribed and included in the appendix.
36. A scale is a set of items with which to record the individual's verbal response. The response is therefore, located on a scale of fixed alternatives, e.g. Yes/ No/ Unsure etc.,. (Cohen and Manion, 1980:247.)
37. Thirteen examples from other sources were included: four from a comic book and nine which were drawn for the Research Interview.
38. For the same reason, the textbook sources of examples of visual text used in the Research Interview, are not acknowledged.
39. This was the case with three of the interviewees with regard to one of the examples selected.

Chapter Four

Results from the Research Interview

In Chapter Four the results of the Research Interviews, Sections 1 - 4, are presented in tables, as figures are not always quoted in the discussion. The numbers of the different questions are the same as those for aspects and examples of visual text in Chapter Three and the Research Interview questionnaire. (See Appendix 4.) Where a number in brackets accompanies a response, this denotes the number of interviewees who gave that particular response. Where an interviewee gave a response, but it was incorrect, it is generally noted as, 'Interpreted'. Where it is noted or implied (from the number who identified and the number who interpreted the example) that certain interviewees did not identify a convention or object, this indicates that they did not offer any response.

The interviewees are grouped into the following two categories:

X - Ten black primary-school children	Y - Ten white primary-school children
Age, sex and standard of Interviewees	Age, sex and standard of interviewees
8 - sub A 9 - sub B 9 - Std 1 10 - Sub B 10 - Std 1 11 - Std 2 (4 children) 12 ⁴⁰ - Std 3 Five girls and five boys	8 - sub A 9 - Std 1 (2 children) 9 - Std 2 10 - Std 2 (2 children) 10 - Std 3 11 - Std 2 11 - Std 3 11 - Std 4 Four girls and six boys

Interviewees' vocabulary during the interview

English is the medium of instruction for both groups of interviewees; however, it is the second or third language for the black group, and mother-tongue of the white group. Throughout the interviews, it was apparent that the black group of interviewees had a limited vocabulary, even in their mother tongue, Xhosa, with which to identify the different items. They would often give a brief description of the object, which was adequate for it to be understood and marked as identified. For example, in 3C, the sink was called, 'a place for dirty pots'. The rooms in 3B, were often called, 'room for eating', 'room for sleeping', or 'sleeping room', 'eating room'. A starfish, when correctly identified, was called, 'a star from the water', etc.,



The group of black interviewees and friends in the informal settlement, with Primrose Ngamhlana in the background.

SECTION 1 :

Brief Profile of Interviewee's Home and School Environment

The findings from Section 1, Profile of Home and School Environment, are provided in Table 1 below. From the interviewee's responses it was apparent that there was a significant difference between the black and white interviewees access to a variety of resources. The white group have far greater exposure and access to books, magazines, TV games, movies, videos, computers and public libraries, than the black group of interviewees.

Table 1: Profile of School and Home Environment

Element	Black Interviewees Responses	White Interviewees Responses
Parent's/Guard.'s Literacy	8: parent's/guardian's literate 1: uncertain, 1: illiterate	10: Parents literate
Pre school Education	3: had attended pre-school (This question caused confusion as some had attended a creche facility)	9: attended pre-school 1: taught at home by mother
Books at home	3: there were no books 5: 11, 5, 2, 2, and 6 books 1: a 'few' books 1: some books 'in a plastic bag'	1: over 200 books 4: 'hundreds' of books, 3: a lot 2: many books - not sure of amount
Magazines at Home	5: no magazines, 1: 1 magazine 3: 'some', a 'few' and 'some in a plastic bag' 1: a lot of magazines	10: a lot of magazines
After School and Homework Supervision	9: some form of after school supervision 1: no after school supervision 7: homework supervision by parent/s, relatives or neighbours 2: no homework supervision 1: received no homework (Sub A)	8: after-school supervision by mothers 2: after-school care facility 8: homework supervision by mothers 2: homework supervision by after-care supervisor and parents
Television and TV games	5: TVs at home (of these 1 child's mother was a 'live-in' domestic worker and had a TV in her 'room') 6: watched TV on a daily basis 3: watched TV on an irregular basis 1: did not watch TV None had or played TV games	9: TVs at home 1: no TV at home 9: watched TV almost daily 10: had their own or played TV games
Computer	None of the children had a computer at home	7: computer at home 3: no computer at home* *1 attended school computer classes
Videos and Films	3: had seen videos, 1 at school and 1 at mother's workplace 7: had not seen videos 3: had not been to movies 2: had seen movies at school 5: had been to movies	10: watched videos, regularly or infrequently 10: watched movies, regularly or infrequently

(See over for rest of table)

Table 1: Profile of School and Home Environment (cont.d)

Element	Black Interviewees Responses	White Interviewees Responses
Pictures and Photographs in Home	6: No pictures and/or photographs on the walls of their homes 4*: pictures/and or photographs on walls of their homes (* 1 referred to the home in which his mother worked, 2 said pictures were of 'movie stars')	10: had paintings, pictures and photographs on walls of their homes
Read to by Parents	8: said they were read to by their parents when small 2: said they could not remember	9: said they were read to by their parents when small 1: was uncertain
Public Library Attendance School Library Facility	3: had attended a public library 7: had not been to nor attended a public library 10: library at their school	10: belonged to a public library 10: library at their school
Textbooks/ Worksheets	10: had own textbooks	10: had either textbooks or w/sheets
Pictures in classroom	10: had pictures on walls of classroom	10: pictures on walls of classroom
Extra books in classroom	10: extra books in classroom	10: extra books in classroom

SECTION 2:

Pictorial Conventions; Graphic and Pictorial Symbolism; Layout conventions

Pictorial Conventions Identified	X	Y
1A. Form Perception: Square	8	10
1B. Form Perception: Box	8	10
1C. Form Perception: Circle	9	10
1D. Form Perception: Orange	10	10
2A. Depth perception:	10	10
2B. Depth perception:	10	10
2A. Relative size:	9	10
2B. Relative size:	3	10
3A. Oblique aerial pers. (all rooms - except toilet)	1 9	10
3B. Normal view of rooms	10	10
3C: Basin	9	10
3C: Water Tank/Barrel	4	8
3C: Drain	2	8
3C: Furrow with plants	3	6
3D: Toilet	10	10

Table 2

1. Form Perception

The black group of interviewees exhibited little difficulty perceiving form with regard to the examples shown, the white group exhibited no difficulty whatsoever.

2. Depth Perception

Both groups perceived depth and size constancy in examples 2A and 2B. Although some children from both groups were unable to name certain animals, they still managed to identify that, e.g., the buck in the background was bigger (in reality) than the lioness in the foreground. Those animals that the interviewees could not identify or misinterpreted were: giraffe; buck (4), buck = cow; buck = buffalo; buck = sheep with horns; lioness, lioness = tiger (3). The animals which the white interviewees could not identify and misinterpreted were: buck (5), lioness = tiger.

The interpretation of the lioness being a tiger, is considered to be due to the fact that there was no male lion in the picture, with its distinctive mane and tail tip - all the interviewees were able to recognize the male lion on Page 9 of Object Recognition, Section 3. The reason why so many of both groups of interviewees could not identify the buck, is attributed to the shape of its body and neck, which as one interviewee responded is more akin to a sheep (with horns), than to a buck. The interviewees easily identified the springbok on Page 3, Object Recognition.

Seven of the black interviewees did not recognize the relative size of the two figures in 2B 1 + 2, one on either side of the central figures. It is uncertain whether this was due to the question (see Appendix 4), which did not explain whether the size relationship pertained to 'real life' or to a literal interpretation of the picture. This was only realised after a white interviewee asked if the question pertained to 'real life' or not. However, as most interviewees seemed to understand that the questions throughout the interview pertained to a pictorial representation of reality, this was assumed not to be the case. The interviewees had seemingly not inferred that the figures were standing on a grandstand and the smaller figures were seated in the row below the two central figures. As the angle of view was from behind and the picture was cropped at the central figure's waists, there were insufficient perceptual cues to facilitate recognition in this regard.

3A. Oblique aerial view

Of all the rooms in this example, the separate toilet on the bottom right was the only room which the black interviewees could not identify, nine of them could not recognize it. This is considered to be due to the awkward angle of view and the fact that the toilet is not presented in true perspective, in relation to the oblique angle from which the rest of the rooms are viewed; instead it appears more like a desk and chair with a round back. Many of the white interviewees were initially uncertain when viewing the drawing of the separate toilet, but perceptually hypothesized (see Chapter Two) that as there was no toilet in the bathroom, the small room next to it must therefore, be a separate toilet. As all of the black interviewees live in houses where there are no bathrooms as such, and have communal 'long drops' or green chemical or portable toilets, it is possible that they did not have the same associative experience with which to deduce the same. The black interviewee's apparent difficulty recognizing this particular example, can be attributed to the illustration itself and not to the interviewee's pictorial perceptual skill.

3B. Normal views of rooms in a house

The interviewees of both groups identified all three rooms. However, the middle picture of what appears to be at first glance either a kitchen or a dining room, was confusing to many

interviewees in both groups. This was attributed to the fact that the only standard items of kitchen appliances and furniture were the stove and table. The dresser on the left is typically found in a dining room. However, the interviewees opted for the kitchen as their response, as the dominant perceptual cues were those of the woman cooking, and the boy standing eating at the table without chairs.

3C. Recognition of content

All of the interviewees recognized the basin and the toilet (cf. 3A above). The drain, furrow with plants and water tank were the most problematic for the interviewees to identify. In addition, several of the interviewees attempted to understand the relationship between all five of the items, as they are presented within one framed border and closely situated to one another.

Four of the black interviewees partially identified the furrow with plants, as: plants. Four interpreted them to be: a road; grass; a yard; a tree. Two of the white interviewees interpreted it to be: a path; birds drinking water. As some yards in the informal settlement have small vegetable gardens, with furrows and rows of plants, it is more likely that the interviewees inability to recognize the furrow is due to the sketch note style of the drawing and the curving furrow, suggesting its recession into the background.

Four of the black interviewees interpreted the drain to be: a bed (3); a stone. One of the white interviewees interpreted the drain to be: a bed, while another partially identified it as: a pavement. The interviewees inability to recognize the drain is probably due to the dense line hatching - creating difficulty easily differentiating the content from the technique.

Three of the black interviewees interpreted the barrel water tank to be: a tree; a house (2). One white interviewee interpreted it to be: a geyser. The barrel water tank may have been unfamiliar to many of the interviewees from both groups, as they live in an informal settlement and the southern suburbs of Cape Town, where the use of water tanks, especially of this style, is seemingly not that common. Had the drawing of the tank included a tap at the base as a perceptual clue, this may have made identification easier.

Pictorial Conventions Identified	X	Y
4A: Cropping: bath	8	10
4B: Cropping: beach	10	10
4C: Cropping: cattle herder	7	10
4D: Foreshortening: hunting	8	10
4E: Foreshortening: standing	9	10
5. Speech Balloons	4	9
5. Sequence A:	0	6
5. Sequence B:	1	7
5. Sequence C:	10	10
5. Sequence easier 5B/5C?	5C = 10	
5. Grouping D:	1	5
5. Sequence E:	10	10
5. Sequence easier 5D/5E?	5E = 10	

Table 3

4A-C. Cropping

From examples 4A - C, only 4A and 4C were interpreted by two and three black interviewees respectively, as depicting figures or limbs which had been broken or cut off. The rest of the examples of cropping, were understood as such, by the majority of interviewees of both groups.

In 4B, the missing foot was understood by the black interviewees to be: in the sand (4); in the water; not in the picture; in the grass; in the mud; in the ice. The white interviewees understood that it was: in the sand (7); a printing error and 'not there, not drawn'.

Recognition of the picture content in 4B proved to be more noteworthy than the interviewees interpretation of where the missing foot was. Of the black group, two interpreted the picture to be of: a girl on ice, and, a little girl in the bush. Of the white group two interpreted it to be: a girl at a lake (as there were no waves) and, 'Not the sea, no waves.' The black interviewees had difficulty recognizing the following items in this picture: Shell (2); rocks (3); starfish = star (from the sky) (4); starfish = star from the house; beach sand = ice; beach sand = grass; water = wind; shell = bottle blue (blue-bottle)

When the black interviewees were asked to identify the starfish in the initial interviews, two replied that it was a 'star'. This was assumed to be a colloquial term or abbreviation for starfish, like that of 'Popeye' which is given to any cartoon like figure. When the 'star' was mentioned for the third time, the researcher asked where the star came from, whereupon the interviewee responded that it was from the sky, and added that they did not know how it got there (onto the beach).

The sea in the background, which is a dominant perceptual feature, is presented with insufficient perceptual cues, e.g., waves and perhaps a ship/ocean liner to facilitate recognition. The shell and the starfish in the foreground are small and obscurely drawn. An interviewee's interpretation of this illustration being a lake is, therefore, entirely justifiable. The illustration itself can be considered to be the cause for certain interviewee's difficulty recognizing it as a 'beach scene'. In support of this, all the interviewees from both groups identified the section diagram of a beach scene, and rocks, in 12D of the Research Interview. Furthermore, since most of the interviewees live in close proximity to Muizenberg beach, Cape Town, it is unlikely that they are unfamiliar with the sea, although they may be unfamiliar with certain marine invertebrates like starfish, especially the species shown.

4D-E. Foreshortening

From examples 4D and 4E most of the black interviewees and all of the white interviewees understood that the limbs of the figures in these examples were foreshortened, and that the figures were not dismembered or deformed in any way.

5. Speech balloons, sequence and comic format

Only four children from the black group identified the speech balloons in 4A, five interpreted them to be: clouds (4); sky. One of the white group interpreted them to be: air bubbles. Either the interviewees were unable to name this convention, or they were unfamiliar with it. The latter is considered to be the case (cf. 6A and 6K).

The interviewees, especially those of the black group, experienced difficulty identifying the order of the frame sequence in 5A and 5B - which are examples of un-numbered and un-labelled multiple-tiered comic formats (5B also had no depicted picture frame). Those interviewees who did not identify the sequence in 5A, either read it: from top left to bottom left, up to top right, down to bottom right, or, from top left to bottom left, to bottom right to top right. The interviewees read 5B, either from top left to bottom left, up to top right and down to bottom right, or across, from left to right for each tier, in descending order. It could be expected that by removing the narrative from 5A and 5B it may have decreased the interviewees' ability to identify the sequence; this was not possible as the print in 5B was very small and interviewees would have had to read and re-read the text - for which they would not have had sufficient time.

Most of the black interviewees and five of the white interviewees had difficulty grouping which figures belonged to the different picture numbers in 5D as some of the figures 'spilled out' of some of the groups of figures. From the reasons given by the interviewees, this was attributed to the figures not being divided by frames.

The sequence of frames in 5C and 5E were easily identified by all of the interviewees from both groups. Nine black and eight white interviewees noted that this was due to the labelling and numbering of the pictures. The rest of the interviewees made reference to the easy to follow sequence of the content.

In conclusion, from the questions 1A to 5E (Tables 2 and 3) most of the black and white interviewees understood the examples of: form perception, depth perception, size constancy, foreshortening, cropping and an oblique angle aerial view, with the white group more adept at understanding these pictorial conventions.

Both, black and white interviewees experienced difficulty identifying the illustration of the furrow with plants (3C) - which was attributed to the style and manner in which the illustration had been executed. Both groups also experienced difficulty identifying the sequence of frames in 5A and 5B, and grouping figures in 5D, this was not attributed to a lack of perceptual skill on their behalf - but rather to the layout and design of the format and content.

The white group appears to be more adept at reading the format of frames arranged in multiple tiers, than the black group. This is attributed to the generous exposure that the white group in this study experience to comics and reading materials.

The black interviewees non-identification of the speech balloons is attributed to the fact that they are unfamiliar with this convention. The black interviewees misinterpretation of the relative size of the figures in 2B, was attributed to the angle of view of the picture. The interviewees non-identification of the water tank (3C) is due to their background experience and lack of additional relevant perceptual cues in the picture. Their inability to recognize the furrow with plants (3C) and the drain (3C) was attributed to the sketchy style in which these were executed and the manner in which the subjects were represented.

6. Western Pictorial Symbolism

Symbols Identified	Denotative Identified		Connotative/ Identified	
	X	Y	X	Y
6A: Gibberish bad language			7	5
6B: Idea/mental illumination			5	5
6C: Impact			0	5
6D: Musical Notes (singing)			8	10
6E: Musical Notes (whistling)			7	10
6F: Explosion			3	10
6G: Heart			10	10
6H: Hearts - Love	10	10	10	10
6I: Dust clouds/movement			7	9
6J: Stars - pain	10	10	2	5
6K: Dreaming/thinking balloon			3	10
6L: Halo and Goodness	0	1	0	10
6M: Horns and Badness	9	10	2	9
6N: Bulb - Idea/Understanding	10	10	0	9
6O: Dreaming/sleep balloon:			8	10
6P: Sun			9	10
6P: Sun's rays			6	10
6Q: Sun			9	10
6P: Sun's rays			7	10

Table 4

6A. Bad language and nonsensical speech

Symbols used successively like, e.g., *&%\$#@#@!!!, generally represent swearing (bad language) or frustration/confusion and usually end with exclamation marks. In this example this convention is used to represent a foreign language, spoken by the figure on the left, which is unknown and nonsensical to the two Khoisan boys. Question marks are interspersed throughout the speech and a question mark is the

last symbol used. None of the black group who identified this example, mentioned that it represented bad language or a question, but seemed to infer its intended meaning from the picture itself, and gave the following responses: Talking chinese - I cant read it; Other language; Maybe speak chinese, I cant read this; Talking - I don't know; He's talking to them, I don't know. While two of the white group understood that it represented: 'Swearing'; 'Swearing at bushmen', three appeared to infer its intended representation from the picture - their responses were as follows: Different language; It looks like he's speaking Zulu or Chinese; Saying hello to the people. None of the children from either group mentioned that the man appeared to be asking a question of the boys, despite the gestural cues of the arms and the inclusion of question marks.

Strictly speaking, it was difficult to determine whether the interviewees truly understood and were familiar with this convention, or whether they established the meaning from the picture content. The ambiguous use of the 'convention' has resulted in certain interviewees considering the man to be swearing at the boys or greeting them or speaking a foreign language.

6B. Idea/mental illumination

This example of jagged lines surrounding figures as a pictorial symbol to represent a sudden idea, was difficult for both groups to identify. Five of the black group interpreted it to be: a sun (4) and sky. Two of the white group interpreted it to be: a crash; crash or something. In this instance the interviewees were not familiar with this graphic pictorial convention, as the illustration itself is clearly drawn.

6C. Impact

The interviewee's responses to this particular example of jagged lines which suggest the impact of a man either kicking a suitcase or it falling on his foot, were difficult to categorise as being understood or not. It was identified by four children of the black group as: kicking a book; chasing his bag; crack (2). Two interpreted it to be: a mountain and grass. Of the white group, five identified it, while two interpreted it as: dropped his case. Five partially identified it as: shock; fright; scared; shaking; shivering; moving a lot - these responses by the white interviewees seem to pertain to their interpretation of the use of two different types of lines in this example - jagged lines for impact and several shorter curved lines to suggest shivering and/or movement. As the researcher pointed carefully to each of the jagged lines and requested that the interviewees responded to these, it can only be presumed that their responses were in terms of the jagged lines, however, the other shorter movement lines appear to have influenced their responses.

6D. Musical notes (singing)

Eight interviewees from the black group identified the musical notes, one interpreted them to be: It shows

the place he is going to. All of the white interviewees identified the musical notes.

6E. Musical notes (whistling)

Seven black interviewees identified the musical notes, three did not identify them, three interpreted them to be: spit; he is cross. All of the white interviewees identified the musical notes.

6F. Explosion

Three interviewees from the black group identified the explosion as: they break the mountain and the stones fall down; shooting, crack; house is breaking down. Four interpreted it as: grass (2); mountain; wind. All of the white group correctly identified it as an explosion.

6G. Heart

All the interviewees from both groups identified the heart. The black group either identified it as a 'heart' or 'love'.

6H. Hearts - love

Half of the black interviewees and all of the white interviewees identified the symbolism of the hearts encircling the heads of a boy and girl, five could not identify the symbolism. All of the white interviewees identified the symbolism.

6I. Dust clouds/movement

Seven of the black interviewees could identify the dust clouds and movement line as implied motion. Nine of the white interviewees identified the example, one interpreted it as: I hate you.

6J. Stars - pain

All ten of the black interviewees identified the stars, however only two identified the symbolic use of stars to suggest pain (in this instance). Five interpreted the symbolism to mean: fighting (2); Man was keeping the stars in his hand (which fell out onto the floor); dancing; showing sun. Of the white group all ten identified the stars and five identified the symbolism. One interpreted the symbolism to mean: Angry.

6K. Dreaming/thinking balloon

Three black interviewees identified the dreaming balloon, one identified the balloon, but not the content,

as: thinking - I don't know what he's thinking. One interpreted the balloon to be a wedding veil and supposed that, 'they are getting married'. Another asked if they were getting married, this was undoubtedly assumed from the man's facial expression, which shows affection for the woman. All ten of the white interviewees identified this convention.

6L. Halo and goodness

None of the black interviewees could identify either the halo or the symbolism of the halo. Nine interpreted it as: sun - very hot; light, joking; light, hot; light; bottle-top; sun; sūn - he is standing; sun - feeling very, very hot; circle. One of the white interviewees identified the halo, the other nine understood it to be either a circle or a hoop. All ten of the white interviewees identified the symbolism.

6M. Horns and badness

Nine of the black interviewees identified the horns, two identified the symbolism as: Dracula; he is an ugly man. Five interpreted the symbolism as: somebody hurt him so that thing (horns) come out; cow; just standing there; man is a cow; he is a pig. Three could not identify the symbolism. Ten of the white interviewees identified the horns and nine identified the symbolism.

6N. Light bulb - idea understanding

All ten of the black interviewees identified the light bulb. Ten could not identify the symbolism, nine interpreted the symbolism as: light (3); lighting (2); [standing] underneath the light; on the house; it is n't dark; thinking of globe. The white interviewees identified the light bulb, nine identified the symbolism, one interpreted it as: he's a big guy (tall).

6O. Dreaming - balloons

Eight of the black interviewees identified that the man was dreaming of a car. One interpreted it as: a car flying, another identified that the man was sleeping but did not understand from the dreaming balloon that he was dreaming, from the dream bubble. Ten of the white interviewees identified that the man was dreaming about a car.

6P. Sun and sun's rays

Nine of the black interviewees and ten of the white interviewees identified the sun. Six of the black interviewees and all of the white interviewees identified the sun's rays.

6Q. Sun and sun's rays

Nine of the black interviewees and ten of the white interviewees identified the sun, one interpreted it to be a moon. Seven black and ten white interviewees identified the sun's rays.

In conclusion, from question 6A - K (Table 4), those Western pictorial symbols which were difficult for both groups to identify, and which were clearly and unambiguously illustrated, were: Impact (6C); Stars representing pain (6J). Those Western pictorial symbols which the black group experienced difficulty identifying, and which were easily identified by the white group were: Explosion (6F); Hearts depicting love between two people (6H); Dreaming/thinking balloon (6K); A halo and its connotative meaning of goodness (6L); The connotative meaning of horns for evil or badness (6M); A light bulb symbolizing a bright idea or sudden mental illumination (6N).

Notably, four black interviewees identified the speech balloons in 5A, and five black interviewees responded that the man was speaking in 6A. This could imply that they understood the speech balloons, however, as the question asked was, 'What is this man saying?', and the symbols were pointed to, the interviewees immediately understood that the man was speaking, and therefore the results are not inconsistent (although only one extra interviewee is involved). Furthermore, seven black interviewees could not identify the dreaming balloon in 6K, but could identify the dreaming balloon in 6O, as the perceptual cues present in 6O were sufficient to facilitate identification, but those in 6K were not.

All of the illustrations and examples in this section were considered to be satisfactory, except for the ambiguous use of the convention of swearing or confusion in 6A and the dual usage of shivering/movement and impact lines in 6C. The interviewees non-identification and misinterpretation of the majority of the symbols presented is attributed to their lack of exposure to and consequent unfamiliarity with these symbols.

Graphic Symbols, Content Recognition and Implied Movement Identified	X	Y
7A: Arrows and Direction of Arrows	9	10
7B: Arrows and Direction of arrows	10	10
7A: Relative size	8	10
7B: Relative size	10	10
8: Jagged separation line	6	8
8A: Electricity cooling towers	2	5
8B: Girl drying hair	9	10
8C: Boy having shower	10	10
8D: Mountains, water etc.	10	10
9: Spiral	9	9
9A: Movement - Man on bicycle	10	10
9B: Lightning	1	10
9C: Movement - Soccer player	8	10
9D: Movement - Man tearing a book	8	10
9E: Lightning	2	10
9F: Movement - Roller-balder	9	10
9G: Lightning	2	10
9H: Rainbow	7	10

Table 5

7. Arrows, direction and flow charts

- 7A.:** Nine black and ten white interviewees identified the arrows and the clockwise direction of the arrows. Three of the black interviewees named the arrows as: point; rounding; signs. Eight black and all of the white interviewees understood the relative size of the cow to the milk-truck.
- 7B.** Nine black interviewees and all of the white interviewees identified the arrows and anti-clockwise direction of the arrows. All the interviewees from both groups identified the relative size correctly.

8. Jagged separation line and images

Six black and eight white interviewees identified the jagged perpendicular line. Two of the black interviewees interpreted it to be: a road; windy.

8A. Electricity cooling towers

Two of the black interviewees identified the electricity cooling towers, one of them as: something burning. Eight interpreted them incorrectly as: mountains (2); clouds⁽³⁾; water; 'steep' with water; clouds and castle. Five of the white group identified them, three as: steaming of smoke; towers; smoke. Four interpreted them to be: volcanoes. This illustration provided little supportive information. The cooling towers are cropped at the base, making it difficult to determine which type of industrial towers they are. The perceptual cue of a pylon in the background is barely recognizable as such. In this instance, the children's inability to identify the picture content is due to the inadequate perceptual information in this illustration.

8B: Girl drying hair with hair-drier

Nine black interviewees identified that the girl was 'doing, dressing or making' her hair. One interpreted it to be: a man and a phone. All ten of the white group identified the picture.

8C: Boy having a shower and mountains, rivers etc.

All of the interviewees in the black group identified that the boy was either washing, washing his hair or having a shower, except one, who responded that he was, 'perming his hair'. All of the interviews in the white group identified that he was showering. All the children from both groups identified some or all of the features represented in this illustration.

9. Spiral

Nine of the black interviewees and 10 of the white interviewees identified the spiral direction.

9A. Movement: person on bicycle

All interviewees in both groups easily identified that there was a man/person on a bicycle and that he was moving fast.

9B. Lightning

The recognition of the pictorial depiction/symbolism for lightning proved to be difficult for the black interviewees; one identified it as: 'thundering', nine could not identify it. Three gave the following interpretations: The air is going everywhere, it goes up and down, up and down; tree; rope. All of the white interviewees identified the lightning, one as: thundering.

9C. Soccer player kicking

Only two of the black interviewees could not identify the movement lines, and interpreted them as: grass. One of the interviewees who identified the movement lines, referred to them as: wind and sand - this was presumably, in relation to the kicking movement of the foot, which caused 'wind and sand' to be flung up (the ground of the informal settlement is sand).

9D. Man tearing a book

None of the black interviewees recognized that the man was tearing a section of a page from a book, whether this was due to the dense stylistic treatment of the subject is uncertain. Nine responded that he was either; reading, reading his bible, reading a book (2) or cleaning his table. Ten of the white interviewees identified the content of the picture.

9E. Lightning

From another example of lightning, two black interviewees identified it as 'lightning' and 'thundering', five interpreted it as: zigzag line; shows nest; tree (2); tree is breaking. All the white interviewees identified the lightning.

9F. Roller-blader blading

Both groups of interviewees identified the roller-blader. The lines implying motion were recognized by nine black, and all the white, interviewees.

9G. Lightning

From this illustration which contained several perceptual cues representing stormy and rainy weather, two black interviewees identified the lightning, as: thundering; thundering and raining. Five interpreted it as: lines; to show fighting; rain (2); raining. All of the white group identified it as lightning.

9H. Rainbow

Seven of the black and all of the white interviewees identified the rainbow.

In conclusion, the results from questions 7A to 9H (Table 5) indicate that most of the black children in this study were able to identify: arrows and their direction; implied movement from the examples given; a spiral; a rainbow and a jagged separation line. The black interviewees were consistently unable to identify the pictorial representation of lightning from three examples, of which the third contained several easily recognizable perceptual cues to facilitate identification. The drawing of electrical cooling towers was not identified, due to the lack of sufficient relevant perceptual cues. Had this picture contained all of these cues, the interviewees may not have been able to identify them precisely, as electrical cooling towers. However, it is probable that the majority would have at least been able to identify them as industrial towers, chimneys or factories, which are obvious features in and around the urban areas of Cape Town

Table 6

Section and Geographical diagrams, Grainy Photographs	X	Y
10A: Section Diagram - Pollution	9	9
10B: Section Diagram - Fishing nets	9	10
10C: Section Diagram - U/ground water	8	10
10D: Section Diagram - beach scene	10	10
11. Grainy Photo: A = lot of trees	3	8
11. Grainy Photo: A = hot & dry	8	2
11. Grainy Photo: B = lot of trees	7	2
11. Grainy Photo: B = hot & dry	3	9
12A: Sea, road and mountain	10	10
12B: Mountains and Rivers	2	10
12C: Cross-section of mountain	0	8
12D: Mountains and rivers	5	10
12E-H: Cross-sections of mountains	3	7
13A: X-Ray View - skeleton/body	10	10
13B: X-Ray View - pregnant woman	8	9
13C: X-Ray View - respiratory	9	10

10. Section diagrams

10A: Nine black and nine white interviewees understood that this example was a section diagram of underground and water, or sea. One of the black interviewees could not identify that this was a section diagram and interpreted the underground section to be a 'stoep' (as she was eight years old, her non-identification of it was attributed to her age).

The following items were not identified and were misinterpreted by the black interviewees: boat; aeroplane; aeroplane = balloon.

10B: Nine black and 10 white interviewees identified the section diagram of trawlers and fishing nets in 10B. The following items were not identified or misinterpreted by the black interviewees: crayfish (8); crayfish = spider (2). One of the white interviewees interpreted the crayfish to be a scorpion.

10C: Eight black and ten white interviewees identified that 10C was a section diagram of underground water. The following items were not identified or misinterpreted by the black interviewees: well (2); well = things that horses ride (established to be a merry-go-round); underground checked area = bridge, material, sand and bricks.

10D: All the interviewees in both groups identified that 10D was a section diagram of a beach scene. The following items were not identified by the black interviewees: seaweed (3); seaweed = sea-flower, tree, flower, fish food, grass, fire; bird; bubbles = little stars.

11. Grainy Photographs

The first photograph (11A) is of a scene which is intended to represent a lot of green bushes and trees. The second photograph (11B) is intended to represent a hot and dry place. Seven black interviewees and two white interviewees selected 11A, as being of a hot and dry place. One of the black interviewees mentioned that both 11A and 11B were of a hot and dry place. Three black and eight white interviewees selected 11A as the photograph which contained a lot of green trees and bushes.

The reason for the difference between the two groups selection and perception, are attributed firstly to the fact that the photographs are not well reproduced in the original, therefore, the necessary detail which would facilitate recognition is lost.

12. Terrain drawings and plateau cross-sections

- 12A: All interviewees in both groups recognized the sea and tarred road in 12A.
- 12B: Two of the black interviewees identified 12B as mountains and rivers, eight interpreted it to be: rivers = roads (7), sand; mountains = grass (3). All of the white interviewees identified it. The black interviewees misinterpretation of the diagram, is ascribed to the fact that the illustration contains very little supportive visual information to facilitate recognition.
- 12C: None of the black interviewees could identify that this was a cross-section of a mountain range. Four interpreted it as: stairs on mountain; two mountains (2); water (white area). Eight of the white interviewees identified it, two interpreted it as: shadow from cloud (grey section); shade on to it (grey section).
- 12D: Five of the black interviewees could not identify 12D as mountains and a river, as they interpreted the following features as: mountains = snow; sand and grass; river = road (5); sea = lines. Ten of the white interviewees identified the relevant features.
- 12 E-H: The four examples of cross-sections of different mountainous features (12E-H) were basically identified by three black interviewees, two of them identified them as: ground of the mountains; sand and mountain. Seven could not identify the cross-section, four of them interpreted it to be: black sand (under-ground area); stones; birds; place for water to run (surface areas); 'stoep'. Seven of the white interviewees identified that these were cross-sections of mountains.

The black interviewees interpretation of the surface of the mountains being water, is due to the graphic marks used to suggest the surface of mountains, which appear to be running water. Had the illustration depicted trees, bushes and/or more rocks on the surface of the mountain, to suggest that these were indeed mountains it would have made recognition for the black interviewees considerably easier.

13. X-ray views

- 13A: All interviewees from both groups recognized that this was an internal diagram of a human. One of the black interviewees understood it to be: 'digit systems in the persons', three referred to it as a 'sporo' (colloquial Xhosa for spook/ghost), two identified it as a 'skeleton'. All the children identified the bones. Difficulty was experienced naming some of the other parts, e.g., none of the black children identified the skull, as such, but

generally referred to it as a head, one responded that it was, 'a head, but no cover'. The eye-sockets were referred to as eyes. The nasal cavity was generally referred to as a nose. The muscles were generally referred to as 'meat' by the black interviewees, and by one as a 'cover of the bones'.

- 13B: Eight of the black interviewees identified that the woman was carrying a baby in utero. Two could not identify it as an x-ray view, but interpreted it as a picture attached to the outside of the woman (one of them was 8 years old and probably too young to understand this visual concept). Nine of the white interviewees identified that it was an internal diagram or x-ray view.
- 13C: Nine of the black interviewees understood that the respiratory system was inside the girl. Two of these interpreted the right lung to be 'worms' and 'intestines or a tree'. The interviewee who could not identify the picture was eight years old and probably too young to have been taught it yet. All the white interviewees identified the diagram.

In conclusion, from the results from questions 10A to 13C (Table 6), most of the black interviewees recognized that 10 A-D were section diagrams, although some of the items in these examples were unfamiliar to them. The fact that the underground section in 10C was depicted in a checked pattern created difficulty for some of the black interviewees to identify it as being underground. Most of the black interviewees understood the intended representations of two photographs (11A & B) to be the reverse of that which they were intended to represent, this was attributed to the quality of the reproduction of the photograph, and the fact that the black interviewees may have been less visually adept at 'reading' grainy photographs than the white interviewees - although this observation is tenuous and debatable (cf. photograph of sand-dune - Page 12, Section 3 and photographs (A - D) Page 14, Section 3). The black interviewees had difficulty identifying the geographical features in 12B and the cross sections of mountains in 12C and 12E-H due to the fact that there are insufficient perceptual cues. Both the black and white interviewees mostly identified the internal/X-ray views of human figures in 13 A-C.

Magnification, Reduction & Overlapping Identified	X	Y
14A: Magnification - cat's claw	2	8
14B: Dinosaur	6	10
14B: Dinosaur size identified	3	10
14C: Dinosaur	4	10
14C: Dinosaur size identified	1	9
14D: Dinosaur size identified with scale underneath	0	10
14E: Dinosaur size identified with scale of car alongside	6	10
15A: Overlapping/superimposition	8	9
15B: Overlapping/superimposition	6	10

Table 7

14. Magnification and Reduction

- 14A: Two black and eight white interviewees recognized that the magnified claw in 14A related to that of the cat. Two of the white interviewees interpreted it as: line = rope; claw = eagle (another interviewee also initially thought it was an eagle). The eight black interviewees were unable to identify it at all.
- 14B: Five of the black interviewees identified the first dinosaur in 14B, three interpreted it to be a: a chameleon; a crocodile; a snake. None of the black interviewees could identify the very large size of the dinosaur. It was interpreted as being the size of: a hand; 'medium'; 'not as big as a house'; elephant; big as a tree; small, like a toy car; person. All of the white interviewees identified the dinosaur and its actual size.
- 14C: Three of the black interviewees identified the second dinosaur in 14C, four interpreted it to be: a chameleon (2); a crocodile; a snake. Ten interpreted it's size to be that of: a leg; a very big frog; a small cow; like a mountain (pointing to huge mountain seen through window); radio; big as a young girl; a chameleon (2); a crocodile; a snake. All of the white interviewees identified the dinosaur. Nine identified the size as being: as big as a car (6); half the size of my house; half a house; big as a house.

14D: None of the black interviewees identified the correct size of the silhouetted dinosaur with a scale diagram of a car beneath it, and interpreted it to be that of: a crocodile (2); a leguan (2); like a mouse; like a dog; same as a cat; hand; smaller than small girl. None of them made reference to the relationship of the scale drawing of the car to the dinosaur. All of the white interviewees identified the enormous size of the dinosaur as being; very big; as big as a/the car (4); about the size of a car; half the size of my house; big as a house; half a house, a little bit bigger than a car. As six mentioned the car in their responses, they were obviously conscious of the size relationship between the dinosaur and the car. It can only be assumed, therefore, that the black interviewees were not aware that the car was included to provide a size scale, and were therefore unfamiliar with the concept of a scale item to facilitate size recognition..

14E: From the inclusion of a car as a scale item, on the same plane next to that of the dinosaur in 14E, five of the black interviewees identified the dinosaur as being big, their responses were: very, very big - as big as a car; big like a car; bigger than a car (2); bigger than car. Four interpreted it as being: like a big dog; not as big as a car, no; as big as a leguan; like that (Willard's battery on nearby chair). Eight of the white interviewees responded that the dinosaur was bigger than the car, two responded that it was: 'as big as a house'; 'the same dinosaur as before, there was also a car.'

From example 14E, by including the scale item on the same picture plane, five black interviewees recognized that the dinosaur was larger or the same size as a car, when they had previously not known or conceptualized the very large size of a dinosaur.

15. Overlapping / Superimposition

15A: From example 15A, eight of the black interviewees understood that the girl was either behind or next to the boy, two could not determine whether the girl was in front of or behind the boy. Ten of the white interviewees understood that the girl was behind or next to the boy.

15B: Six of the black interviewees and ten of the white interviewees understood that the sheep was behind the cow on the left, four of the black interviewees thought it was in front of the cow. Nine of the black interviewees and ten of the white interviewees understood that the cow, on the right, was standing behind the rocks.

The findings for the first question in 15B (above) were difficult to determine as the question may have been misunderstood by some of the black interviewees, despite adjustments made to it in light of the findings from the pilot study (Chapter Three). The researcher attempted to explain the question as carefully as possible to the interviewees, yet they insisted that the sheep was in front

of the cow. Any further questioning, may have given them the impression that the researcher was seeking, and possibly prompting them to give, an alternative response.⁴¹ Therefore either the wording of the question may have caused some misconception or it was due to the interviewee's perception of the picture, however, this was unclear at the time of testing.

SECTION 3:

Living and Non-Living Item Recognition

Only those items which were not recognized and/or misinterpreted, by interviewees from either of the two groups are listed below. Where words or phrases are given in *italics* in square brackets, it indicates that the response/s are already included in the figure column as 'Identified' (Id), but provide additional information as to the nature of the response. In the 'Interpreted' column, the responses given by the interviewees which were not correct, are listed. Figures for those who could not identify an item and/or did not give a response (I don't know, or similar) are not provided, but can be inferred from the identified and interpreted figures presented in the table.

Name of Item	Id X	Id Y	X - Interpreted as:	Y - Interpreted as:
PAGE ONE				
Chameleon	3	9	5: snake (2); mouse; lizard; crocodile	1: lizard
Dividers/Compass	3	5	5: aeroplane (2); scissors; tin opener; bow and arrow	2: pliers; hedge clippers
Egg	8	10	2: round	
Spanner	5	9	4: tools; pliers; screwdriver; tank	
Small bottle	9	8		1: electric screwdriver
Bulldog/ paper clip	3	9	4: something to braai with; purse; house; braai	1: hairclip
Pine-cone	2	9	7: flower (2); pineapple (3); pine tree; strawberry	
Prawn/shrimp	0	9	4: crab; scorpion; ant; snake	1: scorpion
Leaf	6	10	4: flower	
Lizard	4	10	4: chameleon; crocodile; snake; frog	
Needle	9	10		
Acorn	0	6	10: egg (4); egg flower that grows; nut; tablespoon; spoon (2); egg cup with egg inside	3: egg
Caterpillar	2	9	6: worm; rope; 'gogo'; snake (2)	1: 'songololo'
Nail	8	10		
Mushroom/toadstool	5	10	3: things that grows in the house; small tree; umbrella	
Seed:	0	1	4: flower; mole; butterfly; fly	6: wings; fly; part of tree; two separate leaves; bird; leaf
Pencil	9	10	1: tweezers	
Carrot	10	8		2: pot/vase with flowers
Spider	8	10	2: ant; 'gogo'	
Ladybird	1	10	5: gogo (3); spider; insect	
PAGE TWO				
Chips	6	10	3: fruit; curry; bananas	
Binoculars	8	10	1: camera [<i>specs for looking</i> ; ' <i>verkykers</i> ']	
Candyfloss	0	2	6: suckers; cream; melting ice-cream; flower; ice-cream; baked bread	5: Magnum (ice-cream) (2); icecream (3)
Mammoths	0	5	8: monkey/s (2); baboon/s (4); like a cow; elephant	4: type of elephants; elephants (3); [1: elephants in the olden day]

Table 8

Name of Item	Id X	Id Y	X - Interpreted as:	Y - Interpreted as:
PAGE 3				
Snail	8	10		
Mussel shell/shell	0	9	3: avocado; stone; from tree	
Octopus	0	10	3: spider (2); stones (refer to suckers)	
Zebra	9	10		
Slug	0	8	5: snail (4); 'comes out when it rains'	
Springbok/buck	8	10	1: horse	
Cow (sitting)	8	9	1: pig	1: wildebeest
Impala/buck	1*	9	9: cow; cow that stays in the bush; buffalo; cow or <i>[springbok*]</i>	1: horse [2: deer]
PAGE 4				
Single hill/mountain	9	10	1: leg (knee)	
Hills/mountains	9	10	1: sand	
Bird's nest in a tree	5	10	5: flower/s (3); sticks; trees/leaves	
Airport (buildings)	8	10	2: train; aeroplane	
Windsock	3	7	3: bin; flag; drum	3: flag
Weathercock	1	5	8: chicken (2); cock/'haan' (5); for closing <i>[cock made for the directions]</i>	<i>[crow with a compass]</i> 2: compass; chicken
PAGE 5				
Monkey	9	10		
Goods steam train	8	10		
Wheelbarrow	10	8		
Cargo ship	9	10		
PAGE 6				
Goat	5	9	3: sheep (2); buck	1: lamb
Rabbit	8	10	1: squirrel	
Hippopotamus	0	10	3: pig from the sea; pig; element (elephant)	
Envelope	9	10	1: purse	
Postage stamp	7	9	2: house; paper with drawing of house	1: sticker
Baboon	9	10	1: dog	
Wall letter box	9	9	1: shop (window kind outside house)	
Elephant	9	10		
Owl	9	10	1: dove	
Bat	6	10	1: bird	

Table 9

Name of Item	Id X	Id Y	X - Interpreted as:	Y - Interpreted as:
PAGE 7				
Yacht and waves	9	10	1: trees and mountains	
Animal carcass	5	7	5: cat; dog (2) [2: pig; sheep]	2: tree
Inside of cave (khoisan)	2	2	4: trees; house; tree making shade; grass	8: night; sky in night; house; starts at night; sky (2); part of the structure of the hut;
PAGE 8				
Mielie plant	8	10	2: flower (2)	
Fire engine	9	10	1: car	
PAGE 9				
Guinea fowl	7	8	1: turkey	2: peacock; rooster
Bat	6	10	2: bird [something that comes out at night(2)]	
Eagle	6	9	2: owl; duck [bird (6)]	
Ostrich	7	10		
Lizard	5	10	4: frog (2); dragon; chameleon	
Shark	5	10	5: dolphin; whale; fish (2); big fish	
Crocodile	9	10		
PAGE 10				
Moon	9	10		
Fish (single)	10	8		2: seal (fish lying on its side)
Hippopotamus	1	10	1: elephant	
Bird (in tree)	7	10	3: owl	
PAGE 11				
Hippopotamus	0	10	5: crocodile (3); dog from the sea; dog from the water	
Animal skull	5	8	5: mouth (2); bird; teeth; crocodile	1: dinosaur bones

Table 10

Name of Item	Id	Id	X - Interpreted as:	Y - Interpreted as:
PAGE 12 Sand-dune	2	5	7: building; road and sand; road (2); mountains, sand and stones; 'stoep'	
Space rocket launch	2	10	6: bomb; smoke and boat; house; bullet; water and big pen; balloon	
Moon with capsule	2	10	6: sun and bomb; moon and bullet; crayon; sun and balloon; sun and bullet; moon and pencil	
Space Module	1	8	7: house (5); radio; aeroplane	
Lunar surface	1	10	4: mountain; stone - living underneath the water; grass; sand	
Earth	2	10	6: map (2); sun (2); moon (2)	
PAGE 13 Ostrich egg	4	8	4: moon (2); round; bun [4: egg]	2: orange; sponge [7: egg]
Pygmy (height of)	7	10		
Cango Caves	0	5	9: mountains (5); rocks; house is broken down and he wants to travel on; bush; stones; he wants to get on the rocks	4: someone climbing a mountain; people climbing the mountains; man is trying to climb [2: man in a crystal cave; climbing a cave]
PAGE 14				
Snow cap.m.tains	7	10	3: sand; mountains; water and sand	
Elephants (l)	1	3	7: pigs; trees; mammals; sheep (3); rocks	7: sheep; trees; bears/animals; animals (3); grass; trees and bushes
Camels	5	10	5: boats and sea - no animals; boat on water; snake	
Surfer	3	10	7: swimming; ship; sitting on a drum; swimming with boat; driving a boat; on the boat; sliding - riding the boat of the sea; riding boat on water	
Scuba diver	8	10	2: life-saver; life-saving [8: swimming under the water; swimming under the sea; looking for fish; under the water (2); swimming underneath (2)]	
Clouds/landscape	8	10	1: mist;	
Waves and rocks	4	10	6: trees and clouds; clouds (2); smoke; vapour; mist	
River	9	10	1: air is pushing the water	
Small sand-dune	9	10	1: forest	

Discussion of Object Recognition

From the responses in the tables above it is apparent that the inclusion of unfamiliar objects in educational materials is an aspect with which black primary-school children would experience serious learning difficulty. This lack in their visual 'vocabulary' arises directly out of their lack of exposure to a wide variety of visual imagery in different media and learning resources.

In certain instances, the interviewees did not have the vocabulary (spoken), either in English, Xhosa or Afrikaans, when naming items, and would resort to identifying them by way of a description, e.g. a bat, was identified by two interviewees as 'something that comes out at night', or hand gestures were used to explain, i.e., binoculars - some of the black interviewees cupped or curled their hands and held them to their eyes as if viewing through a pair of binoculars. Therefore, if an interviewee appeared to attempt to or struggled to name an item, they were asked, 'Do you know where it lives/comes from?', or similar, to determine if they perhaps recognized the item but were not able to name it, yet could offer an identifying description of it.

Some of the examples in this section were not identified by almost all or all of the black interviewees. For example, the hippopotamus which was presented in three different examples, one of which was a cartoon drawing, another was a head of a gaping hippopotamus and the other was a full figure realistic drawing of a hippopotamus - only one black interviewee identified it from one example. The mammoths (Page 2) were not identified by any of the black interviewees due to the unfamiliar nature of the subject. It is worth mentioning that this particular illustration was inserted into the text without a caption, and with no reference to it in the written text whatsoever. Except that the subject being explained was that of snow.

Other examples were not recognized due to the illustration itself, and not the subject, e.g. the cave with Khoisan (Page 7) inside it, was difficult for most of the interviewees from both groups to recognize as such, due to the fact that the illustration of the cave is cropped and there are insufficient supportive visual cues for the interviewees to infer that it depicts figures in a (cropped) cave and not as they did, e.g., trees, house, tree making shade, night, sky in night, part of the structure in hut, etc.

Many items which were unfamiliar to the interviewees were interpreted in terms of their own frames of reference and experience (of which these examples were numerous), to mention a few, e.g., the paper-clip/holder on Page 1 was interpreted by the black interviewees as: something to braai with; purse; house; braai. The compass/dividers on Page One, were interpreted as being: an aeroplane (2), scissors, tin opener and a bow and arrow. The example of a space capsule orbiting the moon, was interpreted as being: a sun and bomb; moon and bullet; crayon (capsule); sun and bullet; moon and pencil. Although there were pictures on either side of it - of a spaceman walking on the moon and a space rocket launching - to which the interviewees could easily relate the particular example, the only way that they could make closure was in terms of their own perceptions and experience.

Other items were difficult for some interviewees to identify in that they are more relevant to a Western European context than a South African context, and would therefore be recognized by children who were exposed to illustrations and visual materials in Western European books, like those of fairy tales and storybooks, e.g., the old-fashioned water well in 10C, Section 2 of Research Interview and the weathercock/vane on Page 4 of Object Recognition.

The importance of attention to small, but relevant, details which facilitate recognition of an item, was notably important, i.e., the postage stamp on Page 6, although generally identified, was interpreted to be a house, paper with drawing of a house or a sticker. The lettering on the stamp is "RSA" (Republic of South Africa) an abbreviation or name which is no longer used, and with which young learners are probably unfamiliar. The fact that the illustration of an eland on Page 9, was difficult for the interviewees to identify (whereas the jumping springbuck on the same page was identified), is attributed to the fact that in relation to the rest of the animal's body, the head and horns (which are distinctive features) are very small - in addition the body is depicted as being very heavily built and more like that of a large cow than an eland or buck.

The lists in the table below are a synopsis of item recognition from the preceding tables (above), and, recognition of other items from other questions in the Research Interview. For reference, the page numbers from Section 3 (noted in the tables above) and numbers of the other questions in the Research Interview, are given in brackets after the items. In Column 1, the items listed (animate and inanimate) are those which were difficult for many of the black interviewees to identify, but were identified by many of the white interviewees. These items can be considered to be those which the black interviewees could not identify due to the lack of pictorial exposure and formal educational resources in their socio-cultural environments, and not due to any inadequacies within the illustrations themselves. In Column 2, items which were considered to contain either: insufficient or inadequate perceptual cues; content which is unrecognizable due to stylistic treatment; poorly drawn or reproduced imagery, are listed. In Column 3, items listed are those which were not recognized by many interviewees from both groups, and were therefore unfamiliar to them.

1. Items not identified by black interviewees		2. Inadequate imagery	3. X and Y did not identify
Animate From Section 3: lizard (p1) chameleon (p1) pine-cone (p1) crayfish/shrimp/prawn (p1) acorn (p1) caterpillar (p1) bird (p1) mushroom/toadstool (p1) octopus (p3) mussel shell/shell (p3) bird's nest in a tree (p4) goat (p5) hippopotamus (p6) animal carcass (p7) eagle (p9) lizard (p9) shark (p9) hippopotamus (p10) animal skull (p10) bird (in tree) (p10) hippopotamus (p11) earth (p12) camels (p13) ostrich egg (p13) surfer (p13) From other questions: buck (2A) lioness (2A) starfish (4B) shell (4B) crayfish (10B) seaweed (10D) dinosaurs (14B, 14C, 14D)	Inanimate From Section 3: dividers/compass (p1) spanner (p1) bulldog/paper clip (p1) windsock (p3) weathervane (p4) postage stamp (p5) space rocket launch (p12) moon & space capsule (p12) space module (p12) lunar surface (p12) waves and rocks (p13) From other questions: barrel water tank (3C) water well (10C)	From Section 3: candyfloss (p1) inside of cave (p7) sand-dune (photo.)(p12) Cango Caves (p13) elephants (p13) ostrich egg (p14) photographs (B+C) (p14) From other questions: buck (2A) sketchy drawing (1D - style) furrow with plants (3C) rocks (4B) electricity towers (8A) photographs (11 A+B) drain (3C) mountains, rivers & mountain cross-section (12B-12H)	From Section 3: seed (p1) weathervane(p2) mammoths (p4)

Table 12

SECTION 4:

Stylistic Preferences and Interpretations

The results from the stylistic section of the Research Interview are discussed with regard to both groups of interviewees' stylistic preferences, recognition of styles and responses to picture content.

Black Interviewees Comments	White Interviewees Comments
1A: 2 black interviewees and 1 white interviewee/s preferred line and dark wash illustration:	
'They are wearing school uniform - they are clean' 'Because of the names'	'Because of the way it is moving - not just standing still, moving and talking a lot'
1A: 8 black interviewees and 7 white interviewees not like line and wash illustration:	
'People don't have lines on them' 'Has no shoe on' 'Dark' 'Don't want to go to school' 'Not going to school, talking' 'Ugly, dressing ugly' 'No shoes, no socks, dirty, too dark' 'Too dark, don't like boy, he is not dressed nicely, did not comb his hair'	'Position looks uncomfortable, like shop models, they look spastic' 'Because they don't have any shoes' 'Because they don't really have any shoes' 'Because its too much in the shade' 'Because its got all those lines on it' 2 were uncertain why
1B: 4 black interviewees and 7 white interviewees preferred line and light wash illustration	
'Nice clothes, real people' 'Go to school' 'Clean, socks and shoes, hair is combed' 'Faces are nice, nice clothes'	'Because they are the most realistic, neat, well-drawn, real people are standing there' 'It's not coloured and shaded' 'I don't know (why)' 'Because this has not got so much shade' 'Because you can see the picture better' 'Because its prettier than all of them - because those one's are in normal clothes' 'They look much more realistic'
1B: 5 black interviewees and 4 white interviewees did not like line and light wash illustration	
'Black and white in one (child)' 'They are untidy' 'She is not wearing a uniform' 'No names' 1 offered no comment	'Playing clothes' 'Because they are wearing quite casual clothes' 'Because he's just standing there' 1 was uncertain why

Black Interviewees Comments	White Interviewees Comments
1C: 6 black interviewees and 3 white interviewees preferred light line and wash illustration	
'The girl is nice, clothes nice, neat hair, school shoes' Shows them in school, clean clothes, are clean, nice school clothes' 'Going to school' (2) 'Going to school' 2 offered no comment 1 liked the girl on left, but did not prefer the picture	'Like girl's hair' 'School clothes, play clothes' 'Because the children are wearing uniform they've got more smart clothes than these children'
1C: 8 black interviewees and 3 white interviewees did not like light line and wash illustration	
'Did not comb his hair, they are not looking like peoples, looking like drawings, she is carrying books without a plastic for her bag' 'Their hair is untidy' 'They have not combed their hair, faces are ugly' 'Because the middle one is thin'	'Too computerized - it looks like they are doing a rap' 'Some colouring is dark and light' 'He's just standing there - like that' 'A bit blurrish' 'Because its too blurry' 'It looks a bit faded' 'Because that person (in the middle) does not really have hands' 1 was uncertain why

1A, 1B and 1C: Different styles of realism

Interviewees were requested to indicate which of the three examples of boys and girls together, they preferred, and to comment on why they did or did not like the other examples.

Example 1C was the most popular with the black group, and example 1B was the most popular with the white group. Interestingly, the white interviewees preferred the more realistic style, while the black group preferred the wash style, however this appeared to be a response to the content and not the style, as the black interviewees appeared to prefer children dressed in school uniforms, and of neat and clean appearance. Very few interviewees, of both groups, liked the line and dark wash drawing of a girl and boy in 1A, while most did not like it. From both groups' responses, their reasons for not liking the style of the illustration, were due to the skin tone of the black boy and girl which is rendered in a dark wash. One black and one white interviewee did not like the label lines. Both groups of interviewees responded to the content of the illustration and commented that they did not like the fact that, the children were not dressed in school clothes (inferring that they were not at school), the clothes they were wearing were 'ugly' and they were not wearing shoes and socks. The interviewees responses were very similar for this example.

The white interviewees who preferred 1B, liked the 'lighter', clearer tones and realistic style of the figures in this illustration. The black interviewees made no mention of the skin-tone, shading or style, except one, who noted that there were 'black and white in one', referring to his literal interpretation of the use of strongly contrasting volume shadows on the figures.

Both groups, mentioned that they liked the fact that the children were neat and clean, wore shoes and socks, and 'nice' clothes. Those interviewees who did not like this illustration found the children to be untidy. The children's unsolicited responses to their preference for children illustrated wearing school clothes or 'normal clothes', varied from individual to individual.

The black interviewees who liked 1C, commented on the school clothes, and neat clean appearance of the three figures. One mentioned the neat hair. Of those who did not like it, one commented on the fact that their hair was untidy! and went on to add that the figures, 'are not looking like peoples, looking like drawings', and that the figure on the left, was carrying books without a plastic bag.

Black Interviewees Comments	White Interviewees Comments
1D: 2 black interviewees and 5 white interviewees liked sketchy illustration	
2 seemed uncertain and offered no comment	'It looks cute' 4 seemed uncertain and offered no comment
1D: 8 black interviewees and 5 white interviewees did not like sketchy illustration	
'I cant say I like it, because I cant see what it is' 'Ugly' 'Because the people's their heads are skew' 'They are not so big - you cant see them' 1 tried to identify boys from girls, could not make out trees, and called the bridge a boat 3 offered no comment	'Really disgusting' 'Its not very clear' 'Its not drawn so well - cant exactly see what's what' 'Because its untidy' 'Because it looks like a baby's drawing, a 6 year old'
2A, B & C: 2 black interviewees and 5 white interviewees liked dense line hatching	
'Because they are staying in the house' 1 said he liked the man (in the blanket) but not the pictures	'Because they are very nice drawings' 'That's how artists are supposed to draw' 3 were uncertain why
2A, B & C: 8 black interviewees and 5 white interviewees did not like dense line hatching	
'Lot of lines, can't see their faces properly' 'Lots of lines' 'Drawn untidily' 'Dirty, he is wearing earrings but he is a man' 'He is looking unhappy and wearing a blanket' 'They are not drawn neatly' 'Ugly, their heads are too big, lots of lines' 1 offered no comment	'Too many lines, it is confusing' 'Too much colouring in' 'Because it looks blurred' 'Its alright - you can't make out so much - too dark, too much black, I guess' 'Too many lines'

1D: Loose, sketchy illustration

Most of the black children and half of the white children did not like the sketchy, loose sketch-note style of 1D. There was no comparative example to relate 1D to. Those who indicated they liked it offered no response, and seemed hesitant and uncertain, except one white child, who said, 'It looks cute.'

2A, 2B and 2C: Dense line hatching

Nine black and five white interviewees, did not like the examples of dense line hatching - of these ten made reference to the fact that they did not like the style of the drawings, and three to the picture content. One of the examples was that of a somewhat menacing sitting figure in a blanket, and another was a friendly street scene. However, the children all mostly responded to the style and not the content. It can be considered that the style, in this instance, hampered rather than facilitated the children's response to the picture content.

Black Interviewees Comments	White Interviewees Comments
3A: 9 black interviewees and 4 white interviewees liked silhouette style	
9 interviewees indicated that they liked it, but did not give any reasons	'Okay' 'Its creative' (liked decorative borders) 'Quite nice' 1 gave no reason
3A: 1 black interviewees and 6 white interviewees did not like silhouette style	
'Picture is not true, because of white lines' (white lines in mirror superimposed over rabbit's reflection to suggest mirror reflection)	Mostly black - half of animal not showing' 'Ja, its okay' 4 gave no reason
3B: 2 black interviewees and 5 white interviewees liked silhouette style	
2 interviewees gave no reasons	'Decorations' 'Quite nice' 'Okay' 2 gave no reason
3B: 8 black interviewees and 5 white interviewees did not like silhouette style	
'He is a 'skollie', don't like the man to put the child in' 'He is a wrong man' 'Not so much, can't see the man's eyes' 'Man is stealing a baby' 'They are black, do not like man, he got sharp nose and a haircut' 'This man put the baby in here' 'Took the child, put into bag and throw onto rubbish heap' 'Because he's stealing another child' 1 gave no reason	'Does n't show the whole person' 'Because that one's quite normal and its got somebody with another person in a sack' 1 gave no reason

3A and 3B: Silhouette style

Nine black interviewees liked example A, however eight of the black interviewees did not like the same style in example B. This was attributed directly to their aversion to the picture content in 3B, which is reflected in their responses to the 'skollie' putting a child into a bag or sack. In comparison, the content in 3A was innocuous, a jumping rabbit, mirror and a tree. In the light of the black interviewee's almost

unanimous response to their liking of 3A - of the two groups, the black group preferred the silhouette style more so than the white group did. The white group were more consistent in their responses to the style, with almost half disliking or liking both of the examples. Interestingly, the white group made no mention of the menacing content of 3B in their responses.

Black Interviewees Comments	White Interviewees Comments
4A: 2 black interviewees and 2 white interviewees liking very stylized illustration	
1 liked the 'faces, clothes and earrings' 1 offered no comment <i>(1 did not prefer A, but liked the figures faces 1 did not prefer A, but liked the cakes)</i>	'Is quite nice, it does not have as much colour as this one (B)' 'Because they've got colouring in and all smiles on their faces'
4A: 8 black interviewees and 8 white interviewees did not like very stylized illustrations	
'Because the lady is calling the child, Its time for tea, and they are better (4B) because they are eating already' 'They are eating outside' 'They are greedy, fatty boom-boom eating too much' 'Short but not nice' 'The faces are not nice' 'Because they are eating outside' 'Their mouths are too big'	'You don't get such stupid skinny people, people don't get round eyes like that - I just don't like the style' 'They are not doing that much in the picture' 'Because they are eating' 'Because that one looks like a good drawing and it does not have so much activity in it, it does not look so realistic' 'That's cartoon - they don't look really real' 'Because it just shows plain ... its very plain' 'Because they have such a little bit of things' 'Because it looks funny - because that person is very, very round'
4B: 10 black interviewees and 7 white interviewees preferred naturalistic illustration	
'Because they are eating' 'Look nice, real people' 'Faces unhappy, clothes not nice' 'Family is eating' 'Beautiful' 'They are clean, the house is clean' 'I like face, 'mooi' face, clean, they are healthy' 'Because they are not eating outside' 'Because they are eating nicely, the house is nice' 1 gave no reason	'It's realistic - real people' 'The people are doing more stuff, there is more in the picture' 'Because they are eating' 'Because its better drawing and its got more activity in it - it looks more realistic' 'Because its real and all very normal things' 'Because its more realistic' 'I like the way its been drawn'
4B: None of the black interviewees and 3 white interviewees did not like naturalistic illustration	
	'I like the colours, I think' 'It's bigger, its more colourful and there's more people' 1 was uncertain why

4A and 4B: Very stylized illustration and realistic illustration

Only two interviewees from both groups liked the very stylized figures in 4A, while eight from both groups did not like them. For six black interviewees this was attributed to the picture content, and for two of them, to the style of the figures. Five white interviewees made reference to the style of the illustration in their responses, and three to the picture content.

In comparison, all of the black children and seven of the white children preferred the realistic illustration of the figures in 4B. Only one of the black interviewees made mention of the style of the illustration, declaring it, 'Beautiful', while five of the white interviewees mentioned the realistic style in their responses. A factor which may have affected the children's responses, and which was not anticipated when selecting these two examples, was that several of the interviewees noted the fact that there was no background in 4A, while 4B had a full and colourful background. However, this is considered unlikely, if the responses to 3A and 3B are compared to those of 7A and 7B (a comparison between stylized caricature and realism). For 7A and 7B, all the black interviewees and six white interviewees preferred the realistic figure in 7B.

Black Interviewees Comments	White Interviewees Comments
5A: 10 black interviewees and 5 white interviewees preferred the photograph	
'Because its a real family' 'Clean and wear nice clothes and dress hair nice and they look happy' 'Not cross, not ugly' 'Beautiful' 'Dressed nicely, they are happy, very nice, nice hair, washed and combed' 'Nice faces, are clean and clear. I like teeth, is clean' 'I like hands is clean. White girl is moo' 'They are beautiful' 'Look pretty' 1 gave no reason	'Because they are waving' 'Because this one it is a proper drawing ... photograph, and they're wearing nice clothes and it looks more normal' 'I don't know' 'Because they are both very nice' 2 liked both A and B
5B: 2 black interviewees and 8 white interviewees liked the illustration	
<i>(2 liked the illustrations of the children in B, but did not like the early man)</i>	'I like this one, because of the different cultures, Afrikaans, Chinese' 'Because they are drawn' 'Because of the background' 'It is interesting, it has a lot of different things, a lot of colour' 'Its more exciting' 'Is more colourful than that one (A)' 'Because they are in colour' 'Because they are both very nice'
5B: 8 black interviewees and 2 white interviewees did not like the illustration	
'If that was my family, I would be scared to sit with him (early man). It is very ugly' 'I hate him (the early man)' '(Early) Man is ugly, small house' '(Early man) Looks like a gorilla, nice faces (but preferred A) 'They are dirty, they are like baboons, chinese girl hare is kam - die huis is vuil' 'They are not beautiful' 2 gave no reasons	'Because they are just staring at you' 'Because these ones, they've been drawn and its quite bright'

5A and 5B: Photograph and realistic Illustration

The black interviewees unanimously preferred the photograph of a group of friendly smiling children to the realistic illustration of a group of equally friendly smiling children, while three of the white interviewees preferred the photograph and two liked both the photograph and the illustration. In their responses, only two of the white interviewees made direct reference to the style of the photograph and the illustration, in comparison to the rest of the interviewees of both groups who responded mainly to the content. A factor which was not anticipated, was that the early man, on the bottom left of example 5B, would generate a very negative response amongst the black interviewees, which for four of them, was the case. They found this person/creature's presence disturbing, and went so far as to call him a 'sporo', (Xhosa for spook/ghost) and one declared that they hated him.

Black Interviewees Comments	White Interviewees Comments
6A: 10 black interviewees and 4 white interviewees preferred crisp realistic style	
'Because they are at school already. This teacher's face must be right, this looks like any lady you can see on the street - a teacher's face must be ugly' 'Teacher wear nice clothes; faces nice, hair nice' 'Beautiful, dressing nicely' 'Their teacher is nice and clean. Before she comes to school she wash and brush her hair and they are happy' 'I like, teacher is clean, classroom is clean, they are happy. Comb her hair nicely, shoes - nice' 'They are learning' 'Because is clean and the class is beautiful' 3 gave no reasons	'More clear' 'Because its not blurred, really' 'Because I can see it better' 'This picture (6A)... more clear'
6A: No black interviewees and 6 white interviewees did not like crisp realistic style	
	'Because you get quite a lot of those kind of pictures' 'Plain, normal colour just green and yellow' 'Because the classroom is more dull, does not have as much activity in it' 'Its quite clear' 2 were uncertain why
6B: No the black interviewees and 6 white interviewees liked the sketchy wash style	
	'The colours are mixing into other colours' 'Nice background with clouds and bicycle' 'Because its in the bush, its got more activity in it and they're learning stuff' 'I like the dogs, its quite nice - a little bit blurry' 'Because its got a whole lot of happy children in' 'Because there's more background in it and a lot of people'
6B: 10 black interviewees and 4 white interviewees did not like sketchy wash style	
'Because this is lies. No spokes in the bicycle, and he's reading on the bicycle. And its time for school and he's still playing with the dogs, and the dog does not go to school' 'Nice clothes, but looks dirty, dog is thin, look like Popeye' (did not like washes in background) 'Ugly' 'This child did not brush her hair and she is playing with the dog - the shirt is dirty - dirty picture' 'Die kind is vuil, picture is dirty, bag is dirty, she put bag in dirty place, die hare is nie mooi nie' 'Because they are not learning' 'Because shirt is dirty (boy in centre), all the clothes are dirty, (women in yellow shirt) is dirty' 3 gave no reasons	'Its all wishy-washy, its like some-one came and they did a beautiful picture and spilt water all over it' 'Because it is blurred' 'Too blurry' 'Bit smudged'

6A and 6B: Crisp realistic style and sketchy wash realistic style

Ten of the black interviewees preferred the crisp realistic style of school children and their teacher, to the sketchy wash realistic style of school children in a playground. All of the black interviewees who gave responses, commented on the content, being the clearliness, 'nice clothes' and general happiness they perceived in the illustration. The four white interviewees who preferred this style, made comments related to the clarity of the style, and not the content. On the other hand, the six white interviewees who preferred 6B (and responded), found the sketchy wash style to be far more interesting and commented on both the style and the content ('colours are mixing into other colours' - there was more activity in the picture). The same six interviewees found the content and the style of 6A to be rather dull, uninteresting and plain.

All of the black interviewees did not like 6B, and several of them, interpreted the stylistic treatment literally; they found the picture, the figures and their clothes to be 'dirty', due to the patchy washes. Another interpreted the exclusion of the bicycle spokes literally, and said, " Because this is lies. No spokes in the bicycle, and he's reading on the bicycle" Another mentioned that the dog was thin, and looked like 'Popeye' (colloquial term for cartoon). The four white interviewees who did not like 6B, generally found it to be 'blurry', 'wishy-washy' and 'smudged'.

Black Interviewees Comments	White Interviewees Comments
7A: No black interviewees and 4 white interviewees liked caricatured figure	
	'Because it looks like the boy is kicking the ball in a stylish way and because there are people in the background and its on a pavement, and it looks like he's on the road' 'Quite nice, people's faces are not complete' 'Because he looks funny' 'Because I like the way its been drawn and the person looks happy'
7A: 10 black interviewees and 6 white interviewees did not like caricatured figure	
'Because his head is skew, shoes are so big' 'The ball is pap, and the shoe is ugly like a bread. His head is like de Klerk, the hair goes back and that hair does not come back again' 'Don't have shoes' 'Big shoes, his arms are too high' 'Is nie mooi hare, I don't like shoes. Shoes are big - I don't like socks (nor background)' 'He is not healthy, his ball is pap, these shoes are long, the socks are dirty, he did not brush his hair' 'He can't play soccer, kicking ball with wrong part of foot, with eyes closed' 'Because he is thin, his feet are thin' 2 offered no reasons for their dislike	'I never saw a ballerina that does soccer' 'Because you can see its been drawn' 'This one would be difficult to do (position)- not really realistic' 'It does not have that much detail' 'Because he's playing in the street where there's cars' 1 was not sure why
7B: 10 black interviewees and 7 white interviewees preferred realistic figure	
'Has a number, shoes are nice, look like a mase (?)' 'Soccer ball is nice and nice socks' 'Kicking nicely' 'Clean, hare is kam, I like ball and shoes. I like skipper, is clean;' 'The ball is clean, the ball is not pap, the shoes and socks are clean and his hair is neat and he is playing soccer - he's not playing in the road' 'Because he is playing with a ball' 'Because he's big - fat body' 3 offered no reasons for their preference	'I prefer B it looks like some-one who would play soccer' 'Its more real, a number on your back' 'Because that's more realistic' 'Its more naturalistic' 'More realistic' 'Its more realistic' 'Because he's not playing in the street'
7B: No black interviewees and 3 of the white interviewees did not like realistic style	
	'Because he's boring' 'I don't really know' 1 was not sure

7A and 7B: Cartoon like caricature figure and realistic figure

All the black interviewees and six of the white interviewees did not like the cartoonish caricatured figure of a boy kicking a soccer ball and preferred the realistic illustration of a man/boy kicking a soccer ball. The black interviewees responses evinced their literal interpretation of the style of 7A, which was distorted in

the manner of a cartoon or caricature, e.g., one found his head to be 'skew' and shoes, 'are so big', another mentioned that the ball was 'pap' and his shoe, 'ugly like a bread'. The figure's hairline which was situated far back on his head, was interpreted to be baldness, "... His head is like de Klerk, the hair goes back and does not come back again." Another mentioned, logically, that the figure, "...can't play soccer, kicking ball with wrong part of foot, with eyes closed." None of the interviewees responded to the style of the picture as being humorous, although there they laughed disbelievingly at the shoes and thinness of the figure and feet.

Of the four white interviewees who liked the illustration, one liked the 'stylish way' in which the boy was kicking the ball, and was seemingly impressed by the fact that he was playing in the road. Only two responded to the intended humorous style of the illustration.

Conclusion of Findings from Stylistic Preference and Interpretation

In conclusion, the black interviewees showed a strong, almost unanimous, preference for clear realistic styles and well reproduced photographic images. The white interviewees were not as definite in their preference for realism, and exhibited a liking for other styles as well, e.g. cartoon figures, stylized figures, sketchy wash illustration. These findings, when compared with those from Duncan, et al. (1973:95) show a remarkable consistency, even after over twenty years, as they found that the realistic style was slightly less popular with the group of white primary-school children than the groups of black primary-school children.

Almost all of the black group did not like the excessive line hatching in examples 2A, 2B and 2C, while half of the white group liked this style. The clear colour photograph in 5A was unanimously preferred by the black interviewees to the realistic colour illustration of similar picture content in 5B. All of the black interviewees preferred the clear, smooth style of 6A to the 'painterly' wash illustration of 6B, while more than half of the white interviewees preferred the 'painterly' illustration. These results all demonstrated the black group's preference for clear realistic stylistic treatment of subject matter.

Most children from both groups did not like the excessive stylization of figures in 4A, and preferred the naturalistic representation of figures in 4B. These findings are also similar to those from Duncan et al. (1973:95), who found that the stylized stick figure was the least popular with most groups while the realistic figure, used in their examples, was the most popular. The black interviewees liked the silhouette style in 3A, more than the white interviewees did. Duncan et al. (1973:95) also found that the silhouette style was more popular with the black groups than the white group.

Literal Interpretation of stylistic conventions

The black group of interviewees exhibited a definite tendency toward interpreting stylistic conventions, like cartoon and caricature, literally. They were also far more inclined to interpret and respond to the content in an immediate and literal manner than the white group. The examples where this characteristic was particularly noticeable were 3B, 4B, 5B, 6B and 7A.

SECTION 5:

Findings from Interviews with Publishing Personnel and Illustrators and Postal Research Questionnaire

The secondary objective in this study was to determine whether publishing personnel and illustrators knew which aspects in visual text black primary-school children from educationally disadvantaged backgrounds had difficulty understanding and interpreting.

From the four completed postal Research Questionnaires, and five transcribed interviews with publishing personnel and illustrators, it would seem that individually they had varying degrees of knowledge concerning which aspects in visual texts black primary-school children do or may have difficulty identifying. To contextualise the information in the following table: four publishing personnel responded to the postal Research Questionnaire, two of whom provided a fair amount of the aspects listed. (See Appendix 2.) Of these two, only one had been interviewed. However, the findings, as a whole concerning which aspects of visual text publishing personnel and illustrators, had either found or considered to be problematic for black primary-school children to identify are listed below which are taken from the interviews and postal Research Questionnaire.

Aspects listed or noted by publishers and illustrators which were not difficult for majority of black interviewees in this study	Aspects listed or noted by publishers and illustrators which were found to be difficult for black interviewees in this study
Perspective Cropping/truncation	Foreign subject matter Sequence and comic format layout Superimposition/overlapping Relative size/ constant size/ Unfamiliar objects not clearly represented Careful introduction of and poor representation of scientific 'artwork' e.g., magnification, diagrams and cross-sections Inaccuracy Accuracy of proportion Overdetailed shading/ line hatching Literal interpretation of abstract/decorative/figurative pictures Style - painterly, cartoon and naive styles, excessive stylization, caricature and naturalistic representation Speech balloons Odd perspectives/ Angles of view
Aspects investigated in this study which were not listed by publishing personnel and illustrators, but were found to be difficult for black interviewees	
Western pictorial symbolism Western graphic symbolism Speech balloons Reduction with scale item underneath or alongside	
Aspects listed by publishing personnel and noted by illustrators but not investigated in this study	
Cultural and family anachronisms Children's preference for certain clothing styles and youth culture aspirations Inconsistencies from one page to the next Semantic interpretation of objects Aesthetic and user-friendly layout and design of the textbook Too much background or excessive detail, too many layers of imagery, resulting in loss of clarity and foreground imagery Techniques for depicting volume - shade, light, shape	

Publisher One

For Publisher One, a content subject editor and design editor were interviewed together. Both personnel were knowledgeable of visual literacy, and were aware of the fact that black primary-school children had problems understanding visual text, and that there was a lack of knowledge in the publishing industry, generally, and with the skills of illustrators in this regard. They mentioned that they knew of some research conducted between 1960-1970 (the author's names were not mentioned). Although, the second language materials they were currently publishing had been extensively trialled, the visual text had not been trialled. They intended accommodating the needs of educationally disadvantaged learners in textbooks, by building in sufficient 'pointer' or supportive material. They also mentioned that their artwork briefs had not previously been precise enough, and that as a company were unable to do the research necessary to produce successful textbooks, due to the tight schedules and limited financial budgets they experienced. (See Appendix 5.)

Publisher Two

The first interviewee for Publisher Two was interviewed approximately a year prior to the second interviewee. Both personnel had considerable knowledge of visual literacy, as well the importance of an integration between the visual and written text. Their company had established a 'non-profit' research and development unit to trial materials with the users, and give feedback to all the personnel involved in educational text development; in anticipation of curriculum changes due to new educational policy, and also the multi-cultural learning context. By admission, the company was wealthier than most, and could afford to set up this department. Importantly, they were the only company who were actually doing trialling of several of their books, and mentioned that they had trialled both the visual text and written text, certainly for one textbook at the time of interviewing. Their illustrators were given a detailed artwork brief once the subject editor and design editor had drawn it up. (See Appendix 6.)

Publisher Three

Publisher Three had very little knowledge about visual literacy, per se, and that black primary-school children might experience understanding visual texts in educational textbooks. The importance of an integration of meaning between the visual and written text was considered to be important. Their trialling was in the form of 'comeback' from sales representatives and adult consultants of different racial groups, and some consultation with the children, although this was difficult to establish. Their briefs and guidelines to illustrators were unclear, and they were not entirely sure what they wanted from the artists. They experienced problems with tight budgets and schedules. (See Appendix 7.)

Publisher Four:

Publisher Four had a good knowledge of visual literacy, but not specifically about the problems that black primary-school children might experience understanding visual texts in educational textbooks. The interviewee emphasized the need for careful planning and design of the artwork, and whole page layout. However, most artwork was not trialled as the time necessary was not built into the process. They had written textbooks and worked with an illustrator, where the two of them had achieved a synthesis between the development of the written and visual text. The interviewee perceived the problems with textbook production to be those of accuracy, continuity and the quality of the artwork. Their company had only recently employed a Design Editor, prior to that according to the interviewee, the visual text was just slotted into the written text with little thought or consideration. (See Appendix 8.)

Illustrators

All three illustrators generally, had a good knowledge of visual literacy. They all expressed the fact that they had little knowledge concerning the lifestyles, learning needs and educational levels of black primary-school children. They were uncertain concerning which aspects of visual text these learners had problems understanding and interpreting, and received little or no relevant feedback from the publishers concerning the children's responses to the illustrations they produce. Illustrator Three expressed her view that her illustrations just went out, as she put it, " ... into the void."

While the illustrator's contact with the publishing personnel was minimal; their contact with the author was usually non-existent or minimal. Illustrators Two and Three preferred not to have any involvement with the author, while Illustrator One expressed the wish to have consultation with the author. The former, had worked as illustrators for longer than the third illustrator, and had experienced frustration receiving two differing sets of ideas and expectations, and therefore, preferred one line of command, that of the design and/or subject editor. For some reason, the illustrators seemed to view the authors in a less than admirable light. It would seem that the illustrators' dislike for the author's involvement, is due primarily to the fact that the artwork brief to which the illustrator works, has been finally decided upon by the editor, with or without final consultation with the author. Once the illustrator has completed the illustrations to an accepted level, these are then shown to the author. If he/she is dissatisfied with them they are returned to the illustrator, normally by the editor, who relays the author's dissatisfaction and/or corrections and suggestions to the illustrator. (See Appendices 9 - 11.)

Due to the somewhat 'technical' and prescriptive nature of the illustrator's role, and other factors⁴², e.g., professional isolation, they can become bored and demotivated. Seemingly, they attempt to maintain a kind of creative balance and therefore, prefer illustrating and interpreting the text without too much restraint, hence their dislike for very prescriptive briefs. Their dislike for this type of brief, which is usually extremely important for continuity and successful integration of the written and visual text, is due mainly

to a creative professional frustration and also because they generally do not receive the full manuscript, either just the particular page/s to be illustrated or simple directives.

All three illustrators interviewed for this research expressed their need to have more exposure to and a better understanding of black primary-school children's socio-cultural and educational environment, aspirations and levels of pictorial perceptual skill, as well as valid feedback concerning the children's responses to their artwork. They all voiced their need for training or information, workshops or researched guidelines for illustrating visual texts for black primary learners. The onus being on the publishers to provide such, due to the illustrators somewhat isolated professional capacity.

ENDNOTES: CHAPTER FOUR

40. Although this boy is 12 years old, and falls outside the age group parameters for this study, he just turned 12 a few days before the time of interviewing.
41. Normally the researcher did not repeat a question when an interviewee had not given a correct response, except if they had not understood the question.
42. One of the illustrators mentioned dissatisfaction with the remuneration received.

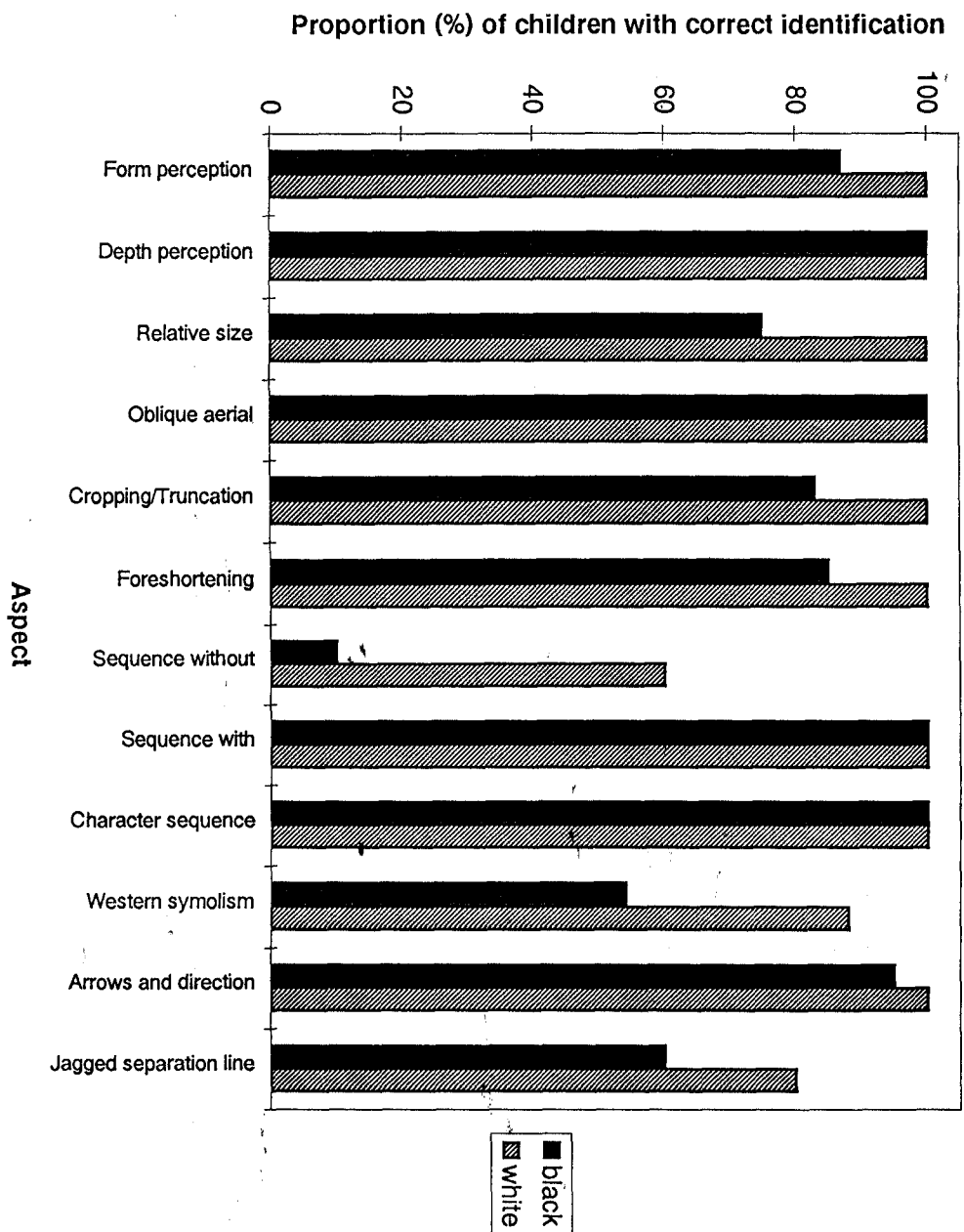
Chapter 5

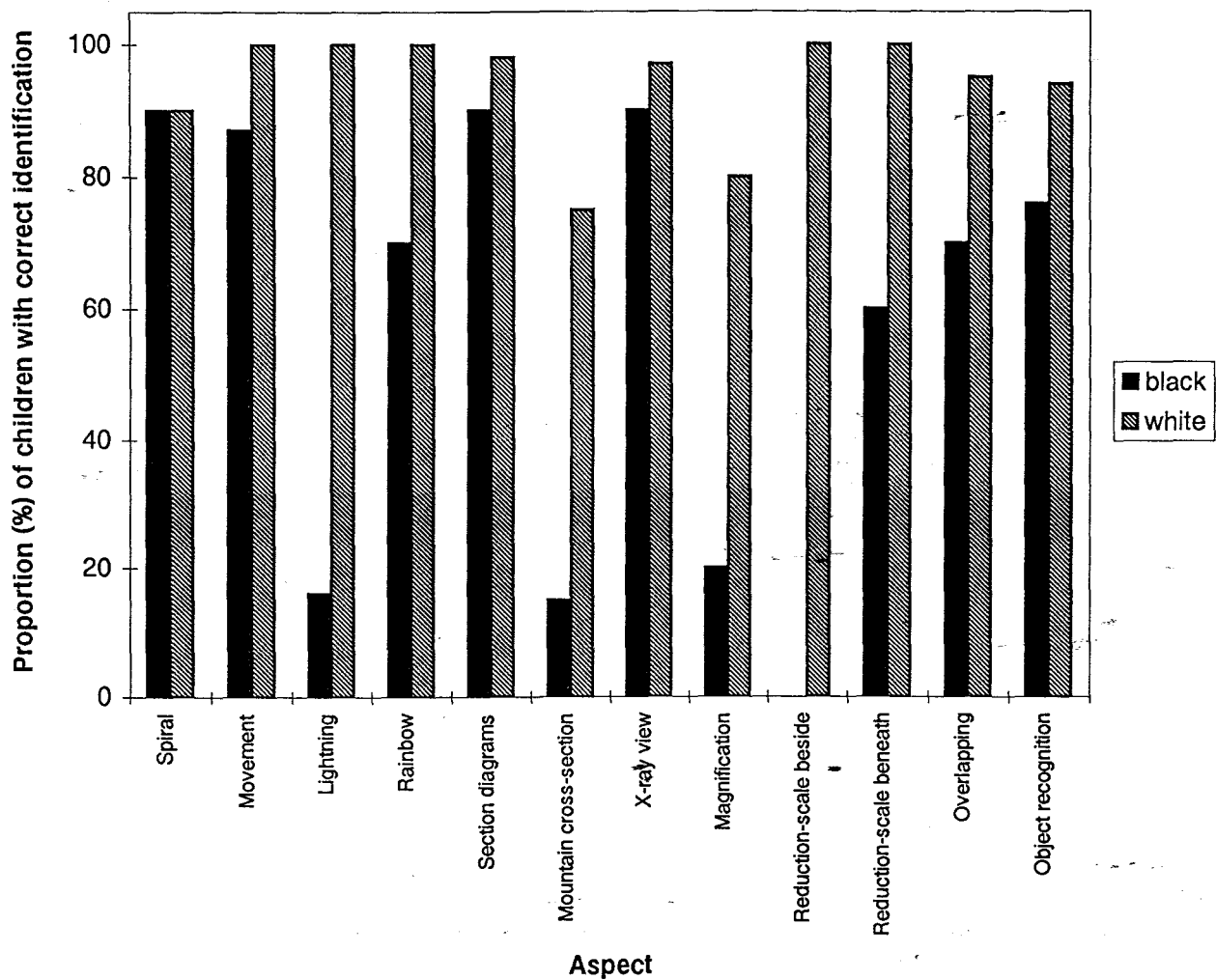
Analysis and Findings of Results from Research Interview

The first component of the primary research objective of this study was to determine which aspects of visual texts in educational textbooks, black primary-school children from disadvantaged backgrounds experience difficulty understanding and interpreting. The series of bar-graphs below (drawn from the following table) summarize the findings of the data from this investigation, and are discussed. The second component of this objective, was to establish whether these difficulties were due either to the interviewees socio-cultural and educational backgrounds or to poorly executed visual text, which are discussed below.

Basic form perception:	X = 87%	Y = 100%
Pictorial Depth Perception:	X = 100%	Y = 100%
Relative Size:	X = 75%	Y = 100%
Oblique Aerial Perspective:	X = 100%	Y = 100%
Cropping/truncation:	X = 83%	Y = 100%
Foreshortening:	X = 85%	Y = 100%
Sequence without etc:	X = 10%	Y = 60%
Sequence with etc:	X = 100%	Y = 100%
Character sequence:	X = 100%	Y = 100%
Western Pictorial Symbolism:	X = 54%	Y = 88%
Arrows and direction of:	X = 95%	Y = 100%
Jagged Separation Line:	X = 60%	Y = 80%
Spiral:	X = 90%	Y = 90%
Movement:	X = 87%	Y = 100%
Lightning:	X = 16%	Y = 100%
Rainbow:	X = 70%	Y = 100%
Section Diagrams:	X = 90%	Y = 98%
Cross-section of mountains:	X = 15%	Y = 75%
X-ray view human figure:	X = 90%	Y = 97%
Magnification:	X = 20%	Y = 80%
Reduction with scale item underneath:	X = 0%	Y = 100%
Reduction with scale item on same plane:	X = 60%	Y = 100%
Overlapping/superimposition:	X = 70%	Y = 95%

Object/content recognition:	X = 76%	X = 94%
Living item recognition:	X = 75%	X = 94%
Non-living item recognition:	X = 78%	X = 94%





In relation to the examples of visual text used in this study, the black and white primary-school children can be regarded as 65% and 90% educationally visually literate, respectively. All but 13 of the approximately 280 examples of visual text were selected from educational textbooks.

It is posited that the difference between the two groups' levels of learned skills of educational visual literacy with which to successfully interpret and understand visual imagery in educational textbooks, arises primarily, from the disparity between the black interviewee's comparatively less exposure to books and reading materials, videos and movies, etc., (see Table 1, Chapter Four) and the white children's comparatively considerable exposure to books and reading materials, videos and movies, both from an early age and as an existing resource in their socio-cultural environments. In addition, only a third of the black interviewees and all of the white interviewees had attended or were taught pre-school. Almost all interviewees in both group's viewed television - the white group, however, viewed slightly more television than the black group. Both groups of interviewees attended various English-speaking schools in the southern suburbs of Cape Town, where it can be assumed that the learning resources available to them in the school situation are on a par with one another, i.e., all interviewees had libraries in their schools and had their own textbooks and worksheets and extra books available to them for reading in the classroom. Seemingly the quality of teaching in the respective schools would be similar as well.

Aspects in visual texts which were understood by majority of both black and white interviewees

The following aspects of Western pictorial perception, present in the visual imagery shown to the interviewees, were understood by almost all, or all interviewees from both groups, with the white group slightly more adept at understanding these conventions.

Basic form perception; Pictorial depth Perception; Cropping and truncation of limbs; Oblique angle aerial perspective⁴³; Foreshortening of limbs; Sequence of comic format and grouping of figures, labelled/numbered and divided by frames; Character sequence in successive frames; Arrows as a graphic symbol and their direction; Spiral line; Pictorial conventions implying movement; Section diagrams; X-ray views of figures.

Aspects in visual texts which were not understood by some of the black interviewees

The following aspects, present in the visual imagery, were not difficult for the majority of the black interviewees to understand, but were not understood by some:

Relative size; Graphic separation line; Rainbow; Reduction with scale item on same plane; Overlapping/Superimposition; Subject matter which was unfamiliar.

Aspects in visual texts which were difficult for the majority of the black interviewees to identify

From the examples shown to them, the following aspects presented significant difficulty for the majority of black interviewees to identify and understand, these were:

Western pictorial and graphic symbolism, e.g., thinking and speech balloons, lightning, sudden or good ideas (jagged lines around figure or light bulb above their head), explosions, stars to suggest pain, halo to symbolize goodness/holiness, horns to symbolize badness/evil; Graphic separation line; Cross-section of mountains; Magnification; Reduction and scale item underneath the reduced object; Unfamiliar subject matter.

Aspects in visual texts which were difficult for black and white interviewees to identify

The aspects from the examples shown, which were difficult for both black and white interviewees to understand and identify were the following: Recognizing sequence in a comic format with varied tiers where no labels or numbering were given for the individual picture frames; Identifying all of the groups of figures which pertained to different picture numbers where no picture frame divisions were given and labelled.

Factors in inadequate visual texts which were difficult for interviewees to identify

Of approximately two hundred and eighty images selected from educational textbooks, approximately twenty images, were significantly difficult for the black and/or white interviewees to identify, due to mainly to the fact that the illustrations themselves were inadequate. The black interviewees were more affected by these difficulties than the white interviewees. The major causes of these difficulties were due to one or more of the following factors:

Dense stylistic treatment of the content, e.g., strong and excessive line hatching or rough, sketchy illustrations, making recognition of the picture content difficult in 3C, 9D and 14I, (a style which incidentally most of the children in both groups did not like (Section 4: 2A, B and C). Insufficient perceptual cues and supportive information, e.g., 2A, 4B, 8A, 12A - H, which hindered the children's identification of the subject. Badly or sketchily drawn imagery, making it difficult to identify the relevant features and therefore the content, e.g., 3C, 4B, 8A. Poorly reproduced and grainy photographs, where a lot of necessary and relevant detail is lost, affecting recognition, e.g., 11A and B, sand-dune (p12). Awkward angles of view, badly composed or cropped pictures and photographs, making recognition difficult, inconsistent perspective, e.g., sand-dune (p12), 2B, 3A (toilet). The sequence of comic formats where more than one tier is presented in variations, where successive frames are not labelled or

numbered, e.g., 5A, 5B. Identifying which figures belong to different pictures where there is no clear separation or lines between them, e.g., 5D. Arbitrary use of patterns or lines to suggest different areas in a section diagram, e.g., 10C.

Recognition of content/objects

The black interviewee's recognition of objects in educational textbooks was an aspect investigated in this study, which clearly evidenced their lack of exposure to books and a culture of reading and learning; and the fact that the presentation of unfamiliar subject matter in educational textbooks is a cause for serious attention. Tables 9 - 12 in Chapter Four show the black interviewees responses and identification and interpretation of the approximately two hundred examples shown to them in the Research Interview. The black interviewees non-recognition and non-identification of certain objects is attributed mainly to the interviewees unfamiliarity with the subject, and to a far lesser extent to inadequately drawn or presented subject matter, which could hinder the interviewee's possible recognition of the subject.

Stylistic preferences and interpretation

An aspect of this investigation was to establish which style/s the black interviewees preferred and found to be the most meaningful for them. The results in Section 4, Chapter Four, indicate that the black interviewees showed a remarkable, almost unanimous, preference for a literal realism, and clear realistic styles for figure and content presentation.

A clear colour photograph was unanimously preferred by the black interviewees to a realistic colour illustration of similar content. The clear, smooth tones of a crisp realistic style were preferred to those of a sketchy wash style. A naturalistic representation for figures was preferred to excessively stylized figures. Strong line hatching was not liked by the black interviewees. The black interviewees liked the silhouette style more so than the white interviewees did. A realistic representation was unanimously preferred to a cartoon like caricature for a figure.

In comparison, the white interviewees were less definite in their general preference for an uncompromised realism, and exhibited a more eclectic approach in their stylistic choices and preferences e.g., they also liked cartoon figures, sketchy wash illustrations and line hatching. Neither of most of the two groups liked the excessive stylization of figures and generally preferred a more naturalistic representation of figures.

Literal Interpretation of stylistic conventions

The black group of interviewees exhibited a definite tendency toward interpreting stylistic conventions like cartoon and caricature, literally. They were far more inclined to interpret and respond to the content in an immediate and literal manner than the white group. The examples where this characteristic was particularly noticeable were 3B, 4B, 5B, 6B and 7A.

Comparison of findings from this study with findings from study by Duncan et al, in 1973

Although the findings of this study can be compared to the study by Duncan et al. (1973), they are not directly comparable, due to the differences in the sample sizes (Duncan's study involved one thousand subjects) and different groups involved (Introduction), and the fact that this study covered many more aspects and used a far greater number of examples of visual imagery than those by Duncan et al. However, it is interesting to note the consistencies and significant differences, where applicable, from a study conducted before 1969⁴⁴, to a study conducted in 1996, a period of approximately twenty seven years later.

The aspects investigated in this study, which were similar to those investigated by Duncan et al. (1973), are: pictorial depth perception, constant size, relative size, overlapping, foreshortening, implied motion and preference for art styles depicting the human figure (discussed above). Generally speaking, the findings of this study do not show a significant difference to those by Duncan et al., except for the black interviewees perception of pictorial depth. Duncan et al. (1973:58) found that the urban black primary-school children in their investigation were well below the white primary-school children in their ability to see depth in pictures containing the main cues of overlap, relative size and horizon line. However, from this study and the examples shown to the interviewees, the black interviewees had no difficulty identifying depth in pictures 2A and 2B, and relative size in 2A, 7A and 7B. This is attributed to the fact that the black children in this study, had consistent exposure to television and ambient imagery, like advertising, bill-boards, magazines etc., living in an urban area of Cape Town. The interviewee's biographical data in Duncan et al.'s (1973:140-150) study show that the black children in the urban and rural groups had far less exposure to pictorial material and visual media, e.g., television, than the urban black children in this study.

The stylistic findings, when compared with those from Duncan et al. (1973:95), show a remarkable consistency. The realistic figure was the most popular overall with all the groups in their study, although the realistic style was slightly less popular with the group of white primary-school children than the groups of black primary-school children. The black interviewees in this study liked the silhouette style more than the white interviewees did. Duncan et al. (Ibid.) also found that the silhouette style was more popular with the black groups than the white group. In this study the cartoon style was more popular with the

white group than the black group, which is similar again to Duncan et al's findings. Of all the stylistic examples shown to the subjects in Duncan et al.'s (1973:95) study, the stick figure was the least popular and the realistic figure was the most popular with all the groups - in this study, the very stylized figure was the least popular with both groups of interviewees, and realistic figures were preferred overall by the black group, and to a lesser extent by the white group.

In conclusion, with respect to the primary objective of this study, the aspects of visual text which the black primary-school children interviewed in this investigation had difficulty understanding are outlined above. These difficulties are considered to be, mainly, due to the lack of learning resources in their socio-cultural backgrounds, and to a lesser extent to the quality of the illustrations themselves. However, the inclusion of unfamiliar subject matter, pictorial conventions and styles with which black primary-school children are unfamiliar and/or do not have the necessary learned conceptual and pictorial perceptual skills to understand; is the responsibility, firstly, of those who produce and include these aspects in textbooks for educationally disadvantaged black primary-school children, and secondly, of those who are in the position to select textbooks and may perhaps decide to select those which contain inappropriate and ineffective visual texts for these learners.

Visual Text Development

Evaluation of the process of visual text development

The second component of the secondary objective of this study was to evaluate the process generally followed for the development of visual texts in educational textbooks.

This investigation shows that firstly, certain visual texts are being produced which are not appropriate for the learning needs and pictorial perceptual skills of black primary-school children - certainly for the children interviewed in this study - and secondly, that there are inadequacies in the illustrations themselves. Therefore, the process of visual text development needs to be evaluated, to determine if the procedure/s used perhaps give rise to the creation of visual texts which are inappropriate, in this instance, for black primary-school learners.

Diagram 1 provides a basic outline of the process often followed by publishers for visual and written text production (see Chapter One).

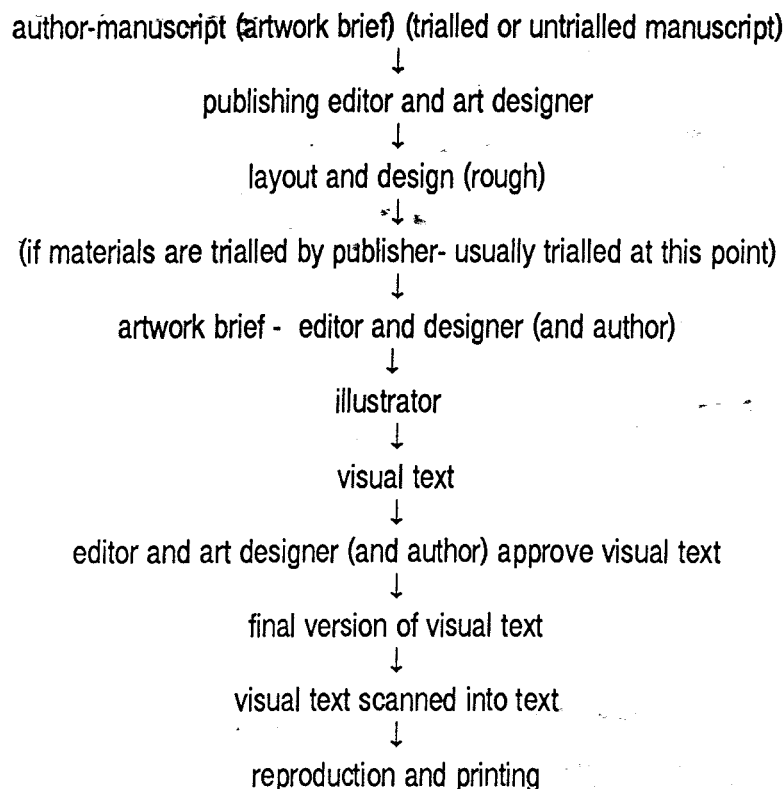


Diagram 1

The above diagram does not show the time frames for the different levels in this developmental sequence, which vary in each case. However, a typical situation is that the time allocated to the illustrator for illustrating the visual text - from when they are given the artwork brief to when the final illustrations are given to the publishers - is often very short, in relation to the overall time taken to produce the textbook, from start to finish. Apart from publisher's general concern with the time factor (see Appendices 5 - 8) - in terms of visual text, the limited time allocation is the first limitation - one which the illustrators themselves perceive to be inherent in this process. (See Appendices 9 - 12.) The three illustrators who were interviewed, expressed that they often had to work to unrealistic deadlines, given the time warranted for illustrating visual text of a consistently high standard. This is often the case, as publishers have either overrun or are attempting to meet their deadlines. The illustrator then has to produce, what is for all intents and purposes, half the book - in terms of space and learning impact - in considerably far less time than it took the author/s to write the materials.

Another factor which is considered to be a shortcoming in this process, is that the illustrations are often only produced once the written text has been edited, and laid out and designed onto the respective pages of the book. If it is the particular publishing company's policy and/or practice to field test or trial materials by obtaining feedback from the intended users of the material, then it is usually done so at this point. Thereafter, the artwork brief is finally decided upon by the editor, designer (and author). The illustrator is then commissioned to produce the visual text.

This procedure is considered to be a major shortcoming in visual text development, in that, in those instances where written text has been trialled, the visual text will not have been trialled at all. This could result in composite texts being such that, the two elements may not be integrated, or the pictorial conventions used and the content presented may not be understood, and furthermore, the particular style/s employed may be inappropriate for facilitating recognition and also may not be meaningful to the users. A case in point is that of an extensively trialled content subject textbook which was submitted for publishing. (See author's comments, Appendix 12.) Although one of the authors concerned, requested prior consultation with the illustrator from the editor, and the author explained their expectations to the illustrator, the visual text was not trialled prior to publication as it was not the respective publishing company's policy to do so. Six of the visual texts from the textbook in question were investigated in this study, and were found to be unsuitable, as the black interviewees were either unable to recognize the presented content, the pictorial conventions used and the particular picture style employed. This could have, in all probability, affected their understanding of the written text to some degree, however, as the children's understanding of the composite text was not researched, this observation is speculative.

Another situation often exists where visual text is given to consultants or in-house personnel for their opinions and perceptions of the illustrations. The fallacy of relying on this practice, as a form of valid feedback, where no trialling has been done, is that the consultants are usually adults, secondly, they may not be of the same cultural group as the users, and if they are of the same cultural group, they are not always of the same sub-cultural group as the learners. Therefore, their opinions are not necessarily always completely valid in terms of the user's perceptions and learning needs.

The following diagram shows another potentially problematic situation, where the developers of the visual text are themselves not in contact with the users of their materials - in terms of the user's learning needs, socio-cultural backgrounds and levels of pictorial perceptual skill (see Appendices 9-11), and yet, have the responsibility of producing texts for learners who have little access to other learning resources, beyond those textbooks available to them in their formal learning environment.

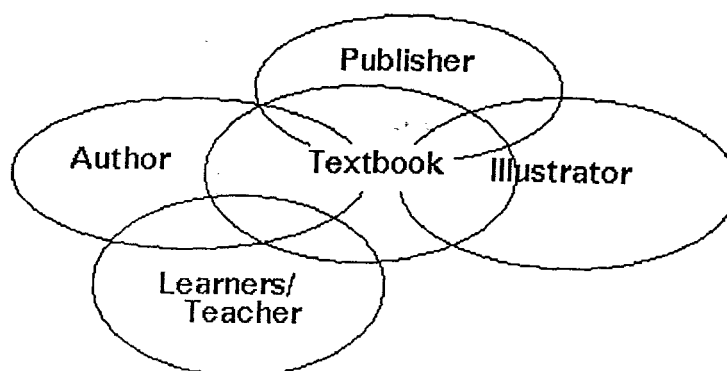


Diagram 2

Diagram 2 indicates that in certain instances the publishing personnel and the illustrators have no contact and feedback with the users. By implication, therefore, visual text is produced by publishing personnel and illustrators who have little knowledge of the learning needs and socio-cultural experience of black primary-school children, beyond their own perceptions of these factors. (See Appendices 9-11).

Diagram 3 shows yet another scenario, which from the interviews with publishing personnel and illustrators, is one which is seemingly the most common, where the illustrator is completely out of touch with the author and the users - black primary-school children - and relates almost exclusively to the editor and art designer, with little or no valid feedback from these personnel with regard to the user's responses to their illustrations. (See Appendices 5-11).

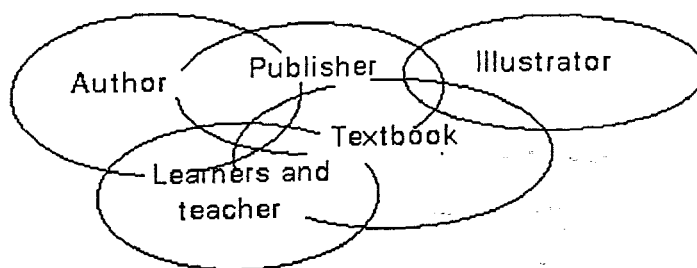
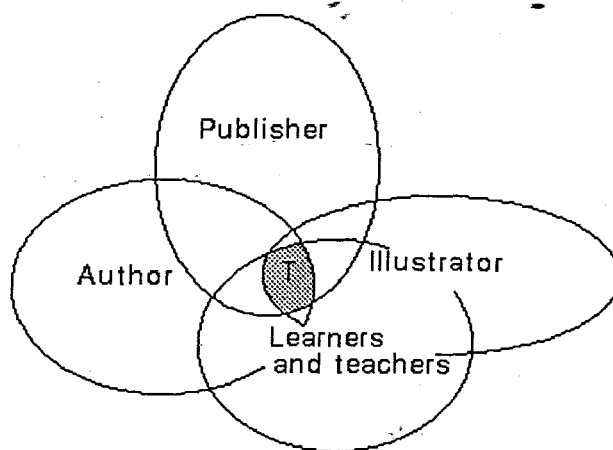


Diagram 3



■ = Textbook

Diagram 4

Diagram 4 shows a recommended relationship between all the persons involved in the development of the textbook. In terms of educational visual texts, it is important that, firstly, the time allocation for artwork be more realistic, given its important learning role in the textbook. It is also important that publishing personnel, illustrators and authors are informed concerning potential areas of difficulty which black

primary-school children (and children of other racial groups) may experience understanding visual text, including their stylistic preferences and the styles of illustration which facilitate easier recognition of subject matter. In addition, illustrators should ideally receive valid and relevant feedback from the users, via the publishers concerned. Where the publishers themselves have little knowledge in this regard, they will be unable to supply the same to the illustrators. The onus again lies with the publishers to ensure that they source and relay this information. Seemingly, the most effective manner in which to acquire this information, is through a process of consultation, trialling and feedback with the intended users of textbooks.

To address the dislocation in the process of visual text development where the illustrator is 'out on a limb', professionally isolated and has no working relationship with the author; where practically possible it is recommended that the illustrator is involved in a consultative process/meeting with the author and publishing personnel early on in the planning stage of the artwork brief, style, design and layout etc. In this way, the illustrator can receive the author's insights, visualisation and intentions for the materials, and the author can receive the benefit of the illustrator's professional skill and insights. The publishing editor, instead of keeping the two apart, can instead facilitate what can be a potentially creative synthesis, for the good of the textbook. There are many variables and mitigating circumstances in this process, however this recommendation can nevertheless, go a long way to avoid potential incongruence between visual text and written text, which can arise from the process itself.

The importance of trialling both the visual and written text together (where trialling of materials is done by publishers) cannot be sufficiently overemphasized. Therefore, it is also recommended that illustrators not only be included in the process of decision making for the artwork, but are also included, again where possible, in at least a small part of the trialling process, so that they can benefit from firsthand experience, and ask questions of the children, concerning any of the difficulties and/or achievements they experience relating to their illustrations.

Teachers

As both groups of children interviewed for this study attend suburban schools, and it was found that there was a disparity between the two groups' educational visual literacy skills, this factor would most certainly impact on the ability of black children from educationally disadvantaged backgrounds to learn effectively from textbooks in the multi-cultural learning environment. Where the textbook is not completely appropriate for the learner's existing skills, the responsibility for providing the necessary supportive information would rest with the teacher. Unless teachers are prepared and trained to anticipate difficulties of this nature, the child has little recourse to other sources, to completely understand the visual text and derive the intended meaning from it. Failure to do so, could make it increasingly difficult for disadvantaged learners to learn effectively in the multi-cultural learning environment.

Trialling of textbooks

From the transcribed recorded interviews with six publishing personnel it became apparent that while they are aware that black primary-school children may have problems with aspects of visual texts, most of them appeared to be uncertain about exactly which aspects these were. Only one mentioned some of the children's responses to their materials, otherwise the remainder had little or no previous or ongoing direct contact with the children concerned. The illustrator's direct contact with and feedback from the children was negligible or non-existent, except in the case of one illustrator, whose earlier professional experience had required some involvement with black teenagers.

The results from the Postal Research Questionnaire indicate that while some publishers have a general knowledge concerning areas of difficulty, none of them stressed that this had been their direct experience, but rather based their perceptions and practices largely on 'received wisdom'.

Feedback and trialling, should of necessity, eliminate elements where the encoders have assumed that the users would understand their message. Another important consideration is the encoder's genuine preparedness (and integrity) to re-work, re-think and re-structure the communication in question in terms of the learner's needs and perceptions. Those publishing companies who did trial certain of their educational materials, did not appear to make it a general policy to do so with all of their textbooks and usually did not trial the visual text at all - with one exception (at the time of interviewing).

Although the importance of trialling is strongly emphasized, this by no means guarantees that texts which have been 'triallyed' are educationally effective. The caveat in this process is that the personnel doing the trialling, need themselves to be adequately trained, to observe, and ask the right sort of questions, and have a good understanding of the conceptual and cognitive skills necessary for the learners to cope with certain levels of learning. A second aspect to note is that certain publishers sometimes repeatedly use the same schools. While it is highly commendable that trialling is being undertaken, the children however, may learn to give the kind of answers necessary, and may also develop a higher level of skill in certain areas, due to the repeated exposure they have to materials, which other learners in a 'cold' situation would not experience.

Komoski (1971:82) notes that, an estimated 99% of the learning materials on the American market have never been systematically and effectively shaped and re-shaped by feedback from learners. The process of 'testing, pre-testing and trialling' mean in effect that materials have been shown to and/or 'used' by the target group, and based upon their comments and any findings, potential and existing materials may have been re-worked and developed accordingly. This process may require several such 'visits' and is developmental and ongoing by nature. The extent to which, and the effectiveness with which, the respective publishing companies test their materials is dependent on the training, integrity and scrupulousness of the personnel involved.

"The testing of textbooks, films, audios and tapes, games, programmes materials ... (etcetera) just prior to their being put on the market is better than not testing them at all - but not by much. Maybe this is why so few producers do it. This sort of 'summative', or pre-market evaluation has very little to do with using the educational consumer to help shape a product that will - with the aid of such shaping - better meet his learning needs. Too often, such summative evaluations simply serve as public relations, sales gimmicks, or as salves to the consciences of both materials producers and materials purchasers. Most often, no one looks at the results of these evaluations. Producers and purchasers alike are content to know that 'at least the stuff was tested'. Neither producers nor purchasers pay much attention to the evaluations that are carried out. They appear to be simply a quasi-scientific ritual having no practical effect on anybody's behaviour. There is no such thing as a summative evaluation when it comes to educational material. Evaluations of educational products are developmental by definition." (Komoski, 1971:82)

The purchase of textbooks is potentially lucrative for publishing companies. In South Africa where 90% of the books sold in this country are educational and the remaining 10% are 'other' books; educational publishers are scrambling for their share of the cake, especially of the large black primary-school market. The ever present realities of constraining deadlines and financial budgets are the lot of publishers, however, these are poor excuses for not researching and developing, and at least trialling, the materials they produce. The company stands to make considerable profits and a percentage of these profits should be invested back into non-profit research and development units.

It is recommended that it become almost mandatory for publishers and textbook developers to supply a brief but concise account inside the textbook cover, concerning if and where the textbook in question was trialled, which age groups were trialled, how many children were trialled, how often and for what period of time. Was the whole book trialled, was only half the book trialled, was the visual text also trialled, were teachers, headmasters or pupils consulted? Was the manuscript re-worked in terms of the recommendations, and who did the trialling. A brief comment like: 'We wish to thank the following schools, X, X and X, for their participation', is hardly indicative of the level of trialling, and may as Komoski has suggested, 'be a salve to the consciences' of the buyers, but is no real indication of the extent of trialling and feedback from the intended users. This would separate those companies who have worked intensively at trialling, from those who do mediocre and token trialling or no trialling, feedback or consultation whatsoever.

This would make the task of the respective provincial textbook selection committees easier. These committees select prescribed books from a wide selection of textbooks submitted to them by various publishing companies. Many textbooks are presented with colourful visually appealing colours, hi-tech covers and persuasive marketing strategies (see Appendix 12), however this offers no guarantee that the visual content is suitable for all learners, and this needs to be a significant criterion when selecting textbooks. If textbook selection committees are trained to critically evaluate the visual text, and therefore, only select textbooks which contain effective visual text, this would ensure that those publishers who

produce inferior, confusing, incomprehensible and irrelevant visual texts, would have to rethink their approach - being commercially motivated enterprises.

Criticism of artwork in educational materials is not the domain of a few, who are knowledgeable, skilled and familiar with artistic techniques, etc. Badly produced artwork, is simply that, badly produced artwork. Artwork which is difficult to recognize the intended meaning from, unless it is a puzzle, is simply that, unrecognizable artwork. Aspects outlined in this research which are considered to be problematic for black primary-school children, for reasons other than poorly produced and inadequate illustration or imagery, should not be avoided and excluded from textbooks, but where they are presented for the first time in a text, and perhaps thereafter, should be carefully and logically introduced to the learner, by building in the necessary supportive information into either or both the written and visual text, in terms of their existing knowledge and conceptual skills. The intention being therefore, to advance the child's educational visual literacy skills and create self-confident learners by providing them with information for learning which is meaningful to them.

Arising from the results of this study the following aspects and elements of visual texts in educational textbooks, need to be considered:

- All visual support material in any form, must support and re-inforce the intended meaning of the written text - the meanings between the two elements in the composite text must be congruent and consistent.
- The layout and design of the two elements should be synthesized, so that learner can easily infer the intended relationship/s between the two elements.
- Subject matter, where appropriate, should be selected which is both stimulating and relevant to the learner's experience and interests, thereby re-inforcing meaning.
- Unfamiliar subject matter should be introduced with an explanation. It is preferable in this instance not to assume at all and rather risk boring a few learners, than losing a lot of learners to confusion and frustration.
- Subject matter should be depicted in such a way that the relevant details are easily recognizable and identified.
- Correctness of proportion and inclusion of relevant detail must be considered where recognition is important.
- Attention to seemingly insignificant details should be given, as their presence may confuse the intended meaning of the imagery and may be interpreted literally.
- Excessive irrelevant detail may be confusing, but insufficient detail can be even more confusing. It would be preferable to err on the side of providing too many relevant perceptual cues than too few.
- Sufficient visual cues and written information to aid recognition must normally be included/built into visual text especially where the imagery has didactic value, i.e., where new concepts or

unfamiliar subjects are being explained or depicted.

- Where pictorial symbolism and/or culturally specific symbolism is depicted, the meanings should be explained, so that learners from other cultural groups can understand them, rather than avoid them.
- Graphic symbols, e.g. speech balloons, dreaming balloons, lightning, stars depicting pain, explosions etc., should be introduced with an explanation.
- Arbitrary patterns used to differentiate between areas, e.g., of a diagram, should be avoided, and where possible, rather represent as faithfully as possible the intended subject, unless a legend is provided. Where a legend is provided, its function may need to be explained.
- Inconsistencies in aerial perspective or perspective drawings should be avoided.
- Scale items should be included with unfamiliar subjects or magnified or reduced subjects to aid size conceptualization, but should be included on the same picture plane as the subject, unless otherwise explained.
- Sequence of picture frames in comic formats should be numbered or labelled, especially where more than one horizontal tier, or variations of horizontal and/or vertical tiers are presented.
- Shading used to depict volume should be rendered carefully and correctly to avoid mis-identification, e.g. an ostrich egg which was interpreted to be a sponge or a bun, due to the minimal use of shading and a stylistic stippling effect.
- Arbitrary cropping of the picture frame should be avoided. Cropping should not exclude details and cues which are important for recognition. Where possible complete drawings of objects and figures central to the meaning of the illustration are preferable to incomplete drawings.
- Difficult, awkward or atypical angles of view should be re-considered in favour of an angle of view which can facilitate ready recognition of the subject.

Style:

- Styles which are excessively detailed and fussy, e.g., dark excessive line hatching, should be avoided where subject matter is presented which requires ready recognition.
- Grainy photographs, where important detail is blurred should be re-considered in favour of clear well reproduced photographic imagery, or a clear detailed drawing of the subject.
- Badly, carelessly or thoughtlessly drawn imagery, which shows inconsideration for the learner's needs should not be accepted for didactic purposes.
- As caricature or cartoon styles can be interpreted literally as being deformed and ugly, and therefore not always humorous, these styles can be explained to the learner, by beginning with a single realistic drawing of the subject and a second drawing showing how the subject's features have been altered. However, repeated use of a style that is not appreciated, e.g., for continuity characters in a textbook, are not recommended, as not all learners of all groups may appreciate them, whereas learners from all groups will relate to a realistic style.

- Excessively stylized representations of figures are not generally liked.
- Textured patchy, painterly styles can be interpreted literally, as being dirty - clear, realistic illustrations with smooth even tones were preferred by the black interviewees in this study.
- Clear colour photographs were preferred to realistic drawings of similar subject matter.

Limitations of this Study

A study involving a sample size of ten black primary-school children, of the Xhosa ethnic group, living in an informal settlement in the southern suburbs of Cape Town, does not constitute a representation of all the different cultural and sub-cultural groups, and numbers, of disadvantaged black primary-school learners in South Africa, let alone those of the Xhosa speaking group. Therefore the localised and small sample size could be considered to be a limitation of this study. Due to the intensive nature and large number of examples used in the Research Interview, it was not feasible to make the sample size any larger - given the necessary recording of responses and the page space limitation of a study of this nature. It does, however, provide a window on a problem which, speculatively, could affect millions of black primary-school learners.

What may also be considered a possible limitation of this study were the different ages of the interviewees. The selection of ages of the respective interviewees could have been divided into a more equitable distribution between the different ages and their primary-school standards, consequently involving more interviewees from each group, or, the study could have focused exclusively on one or two age-groups and/or primary-school standard, e.g., Standards 1 and/or 2. This age-group to standard parallel may have been difficult to draw equitably, as black children are sometimes older than their white counterparts of similar standards. However, the age-group spread in this study was not considered to be an undue limitation, as the youngest children from each group, eight years old respectively, were in some instances more adept at understanding certain conventions than the older children in their group. Furthermore, where a child was unable to recognize a certain convention, and this was attributed to their young age this was noted as such (this happened in two instances - see Chapter Four). The examples of visual text which were used in this study did not require difficult conservation or spatial skills ability testing, but rather investigated the interviewee's familiarity with certain pictorial conventions and subject matter and their preference for and interpretation of certain art styles used in textbooks.

Another aspect which may be considered to be a limitation of this study, was that the teachers of black primary-school children were not consulted and interviewed for the research, in the same way that the publishing personnel and illustrators were. This would, in all probability, have provided a more valid 'chalkface' opinion of children's difficulties with visual texts, however, this was not feasible given the extra dimension of research necessary. Furthermore, there did not seem to be any published research to date,

which focused on both the producers of visual text and the users, black primary-school children.

The most serious area of neglect in this study, is that the educational visual literacy of a group of rural black primary-school children was not researched, as the rural proportion of black primary learners is by far the largest group of learners in South Africa. (See Appendix 1.) However, due to the fact that funding for this study was not forthcoming⁴⁵ and there are relatively few truly rural black children living in the Western Cape⁴⁶, the original intention of interviewing rural black children (as well as, urban black children) was unfortunately, foregone.

Suggestions for Future Research

Comparative studies which focus on the visual literacy skills of urban, peri-urban and rural groups of black primary-school children, from the different cultural and sub-cultural groups.

Studies involving both the visual literacy skills of teachers and their pupils.

Studies which focus on the synthesis or incongruence of meanings between the written and visual texts.

FOOTNOTES: CHAPTER FIVE

43. Although 9 of the interviewees did not identify the toilet, they all identified all of the other rooms in this example. This was attributed to the incorrect perspective drawing, and not to their pictorial perceptual skill.
44. H. F. Duncan wrote his PhD thesis in 1969. The results and findings from this thesis are represented in Duncan et al., 1973.
45. Despite numerous attempts to acquire funding for this study.
46. Rural communities in the Western Cape comprise of mainly coloured and white communities. There has been a recent influx of a very few black communities into the rural areas of the Western Cape, who have apparently settled on the fringes of large towns, however, in one instance, e.g. Robertson, they could not be classed as rural due to their immediate proximity to the town and the length of time they have been living there.

Appendix 1

Black Pupil Registration Statistics

It is estimated that by the year 2000 there will be nearly 15 million school children in South Africa, most of them black pupil registrations (BPSA¹, 1990:40). Statistics from the South African Institute of Race Relations (SAIRR), state that in 1993, approximately 10 million pupils (including the 'independent' homelands) were enrolled at primary and secondary schools throughout South Africa; of this number, 8 million were black pupils, and of this amount 6 million were primary school children (SAIRR, 1995:709-710). The largest percentage of black primary school children, were enrolled at state-aided farm and rural community schools (SAIRR, 1995:707).

97% of children enrolled at rural community and state-aided schools were primary school children, and 73% of them were enrolled in classes below Standard 2 (SAIRR, 1993:600-601). From these figures, it can be estimated that the largest group of black primary school children, are those attending rural schools enrolled in classes below Standard 2.

Important Factors Contributing Toward Ineffective Education

Learning skills

The inadequate development and acquisition of basic education skills are a direct consequence of inadequate learning resources. Grade 1, the first year of schooling is especially important as basic skills are taught and acquired, however, the highest failure rate for black pupils, of 25%, is at the end of this year - indicating that children are not prepared for learning and the provision of pre-primary education is wholly inadequate. In 1993, 1% of the total education budget was allocated to the pre-school sector, which had grown from 0.62% in 1992/3 (SAIRR, 1995:702; 1993:596).

Human Sciences Research Council (HSRC) (1981) findings established that only 42% of black pupils reached standard 2 without repeating a year (or dropping out) compared with 92.4% of white pupils (Short, 1985:32). 77% of black primary school children finished their primary schooling and only half of these did so within the minimum seven year period (Threshold Project Report, HSRC, in SAIRR, 1995:698). Given the high drop-out rates at primary school level, illiteracy levels in South Africa are rising (SAIRR, 1993:614).

Professor Donald of the University of Cape Town, maintains that it is not possible for older children without basic skills to acquire those skills at a later stage in development, in the same way that younger children would (SAIRR, 1995:708). Many children learn by rote or 'parrot-fashion', regurgitating facts simply to pass tests and exams. By doing so, they only have a superficial and often dislocated grasp of the subject concerned, and have not acquired the necessary learning skills.

Medium of Instruction

At the beginning of Std-3, black pupils make the difficult transition children from their mother tongue as medium of instruction (MOI) (Grade 1 to Std 2) to English as medium of instruction - a process for which the majority of them are inadequately prepared. English is usually a second or even foreign language for most black pupils as many pupils do not experience an environment of sustained exposure to English outside of the classroom. A report by the Threshold Project of the Human Sciences Research Council (HSRC) states that "... nothing in the education system acknowledges the 'enormous liabilities' of learning through a second language". English lessons prior to Std 3, do not equip pupils with the necessary language skills and vocabulary to learn their content subjects through the medium of English. Research by the Centre for Social and Development Studies, University of Natal, and

¹. British Petroleum in South Africa, Social Report - The Right to Learn, 1990.

NEPI² state that using a second language as MOI was likely to fail where pupils were not widely exposed to English and to a literate culture outside of the classroom (SAIRR, 1995:699-700).

Teachers

Teachers occupy a key and crucial role in a child's formal learning process. They often labour under a demoralising burden of overcrowded classrooms and low salaries. According to the DET the average ratio of teachers to pupils in 1992 was 1:42, while RIEP estimated that in some of the homelands, the figure was as high as 1:61 (SAIRR, 1995:712). In 1992, 14% of teachers employed by the DET and the non-independent homelands did not have a teaching qualification and 57% were under qualified³ (SAIRR, 1995:Key Points). Poor results obtained in certain subjects were traced to poorly qualified teachers who had been unable to provide proper foundations for learning in these subjects (SAIRR, 1995:715).

Loss of teaching hours

Another contributing factor toward the failure rate of black primary school children is the loss of teaching hours, demotivating teachers and pupils alike. Some of the main causes for the loss of teaching hours are: Classroom non-attendance of either or both pupils and teachers; Strikes and boycotts by either or both pupils and teachers; Inter-factional and political violence; Extra-mural activities conducted during official teaching time; Voluntarily shortened 'breaking up' times; Teachers pursuing further educational qualifications during official teaching hours (SAIRR, 1995:692-4; de Villiers, 1990).

Classroom equipment and textbooks

Many black primary schools, especially those schools in the rural areas, experience a general lack of suitable classroom accommodation, facilities, furniture and equipment. Textbooks and teaching materials are also often in short supply. (SAIRR, 1995:703,706-7). The DET announced that the shortages of textbooks were due to the large increases in pupil numbers, the movement of pupils from rural to urban areas and the failure of pupils to return books (SAIRR, 1993:599). In 1987, for the first time, textbooks were supplied free of charge to black pupils at DET schools. Prior to 1987 parents of black school children had to purchase textbooks. "In communities in which mere survival is no simple matter, items such as school uniforms and ... the most basic classroom equipment become unattainable luxuries." (BPSA, 1990:41)

Socio-economic conditions

Socio-economic conditions outside of the school which would have an affect on the child's learning process, not already mentioned in the main section of this thesis, are the following: Poor nutrition - affecting concentration and retention of information, Proximity of school to home - walking long distances to school and back; Accessibility and affordability of transport; Stressful living conditions; Poverty; Violence; etcetera.

From the above-mentioned factors it is apparent that the quality of education available to many black primary school children is inadequate. The educational system as it exists, possesses neither the trained human resource, nor educational infrastructure, to cope satisfactorily with the volume of growing educational need. Although many significant changes are planned and being implemented for an improved South African education system, these changes will require time for the full anticipated value of their implementation to become effective.

². National Educational Policy Investigation (NEPI).

³. Salaries paid by the Department of Education are commensurate with official teaching qualifications, promotion and years of service.

Copies of completed postal Research Questionnaires sent to Publishing Personnel

(The respondent's name and company have been deleted for purposes of anonymity)

RESEARCH QUESTIONNAIRE

Name of respondent:

Organisation or Company:

What aspects in or of visual images (in educational materials) have you found to be problematic for black primary school children? (If time is a constraint these can be in list form)

Foreignness of subject matter. Illustrator and/or editors & authors may assume, for example, that a pic. of a pampally obscured hippo will be recognisable to African children in sub A, & it's not. But in general I find recognition of visual images to be less of a problem than is often indicated in research papers I have read on this. I find teachers tend to anticipate problems of recognition among children, without good reason.

Which aspects of the above do you regard as being the most important for research investigation? (Once again, if time is a consideration you could mark the above with an asterisk, and itemise as 1, 2, 3 etc in order of priority)

"The children won't know this thing" —

while in practice children often can, with some prompting, recognise the object, or deduce a lot about it — e.g. that it's an animal, it's frightening, etc.

Do you foresee or have any solutions to any of the above (are they workable in the given context) ?

- ① Changes in teacher training.
- ② Suggestions ^{to teachers} in texts - "If children don't recognise this creature, let them to talk about it, deduce information about it, etc."
- ③ Fuller & richer exposure to a variety of illustrations in school materials - far more important than limiting text pics to what is likely to be familiar & unambiguous.

Do you have any other observations or suggestions you feel are important and that this research should take into consideration ?

Picture/image recognition or literacy to be more significantly a part of the school curriculum, & a part of language courses.

Thank you for your co-operation.

RESEARCH QUESTIONNAIRE

Name of respondent:

Organisation or Company:

What aspects in or of visual images (in educational materials) have you found to be problematic for black primary school children? (If time is a constraint these can be in list form)

I think that all children have problems with certain aspects of a/w.

Particularly with regard to:

- perspective
- Cultural and family anachronisms
- Inconsistencies from one page to the next
- Inaccuracy
- Over detailed shading / line hatching
- Too much background detail

Which aspects of the above do you regard as being the most important for research investigation? (Once again, if time is a consideration you could mark the above with an asterisk, and itemise as 1, 2, 3 etc in order of priority)

1. Perspective
2. Anachronisms.

Do you foresee or have any solutions to any of the above (are they workable in the given context) ?

I think the solutions lie in thorough research followed by extensive publicising and dissemination of findings.

Do you have any other observations or suggestions you feel are important and that this research should take into consideration ?

None that I did not state in the interview.

Thanks

Kaer

Thank you for your co-operation.

RESEARCH QUESTIONNAIRE

Name of respondent:

Organisation or Company:

What aspects in or of visual images (in educational materials) have you found to be problematic for black primary school children? (If time is a constraint these can be in list form)

I can't say that I have found any aspects of visuals ~~that~~ that are problematic to black kids exclusively - rather, the problems of visual literacy relate to previous exposure or knowledge of visual conventions. All kids ^{can} have problems with

- ① SEQUENCE
- ② PERSPECTIVE
- ③ INCOMPLETE ILLUSTRATION (IE: OBSCURED OBJECTS CANNOT BE IDENTIFIED PROPERLY)
- ④ CARICATURE
- ⑤ LITERAL INTERPRETATION OF ABSTRACT/DECORATIVE/FIGURATIVE PIX

Which aspects of the above do you regard as being the most important for research investigation? (Once again, if time is a consideration you could mark the above with an asterisk, and itemise as 1, 2, 3 etc in order of priority)

② + ③ + ⑤

Do you foresee or have any solutions to any of the above (are they workable in the given context) ?

Do you have any other observations or suggestions you feel are important and that this research should take into consideration ?

Rather than search for 'ideal types' of illustration, I think that you would do well to analyse what styles of illustration leads in various environments ^{of these styles} are exposed to, and then assess their usefulness in the educational context.

Thank you for your co-operation.

RESEARCH QUESTIONNAIRE

Name of respondent:

Organisation or Company:

What aspects in or of visual images (in educational materials) have you found to be problematic for black primary school children? (If time is a constraint these can be in list form)

(Please note observation at end of questionnaire.)

- 3 * - accuracy + clarity
- handling of perspective
- depiction of relative size if not accurate / in proportion
- 4 * - showing only part of something, e.g. when person is in corner of the picture & only head and shoulders can be seen, or when part of one object is obscured by being behind another object
- unfamiliar objects when not shown clearly
- 1 * - style
 - painted style, although realistic, can be difficult to interpret
 - excessive stylization, e.g. cartoons and naïve style can also
- when details are not sufficiently accurate, e.g. cartoon style with stick-like legs or 4 fingers on hand
- sequences of pictures forming a story, when gaps in between pictures/stages of story are too large, i.e. when too much has to be filled in by readers' imagination
- 6 * - too much detail causing confusion
- too little detail so pictures are dull
- 5 * - 'scientific' artwork, such as enlargements, diag. and cross-sections, if they are not done well and introduced carefully.
- 2 * - techniques for showing shade, light, shape, if not handled carefully

Which aspects of the above do you regard as being the most important for research investigation? (Once again, if time is a consideration you could mark the above with an asterisk, and itemise as 1, 2, 3 etc in order of priority)

Do you foresee or have any solutions to any of the above (are they workable in the given context) ?

Careful briefing and insisting on quality work are obviously important in avoiding the most straightforward of the problems I have listed.

For problems like perspective, stylization, shade and light, partial views, we tend to insist that unusual, whacky, or excessive handling is not acceptable, but we do accept their use if done very carefully. We're also aware of the danger of oversimplifying visual images, of using impoverished artwork, for the sake of trying to avoid the problematic areas.

For some of these problems, and for diagrams, cross-sections, etc., one solution is to introduce them and support them in the text, captions, and labels.

[I think I can say that we (at OUP) are intensely aware that in order to "brief carefully", and to know when artwork has been "done well", we need to pay serious attention to research projects on pupils, and are very much looking forward to seeing it.]

Do you have any other observations or suggestions you feel are important and that this research should take into consideration ?

1. Observations re problematic areas (first question):
Some problems I have listed I have seen black primary school children having problems with. Most of them are 'received wisdom' about such problems (gleaned from reading on the subject, & colleagues) or problems that have been voiced by teachers, rather than pupils, involved in trialling our material.
2. I have experienced that distinguishing between the teachers' response to artwork, and the pupils' response, is not always a simple matter. I'm not sure whether it would fall outside the scope of your research, but it may be useful to pay some attention to whether visual images are made problematic for pupils by their teachers' expectations of what they will not cope with, or more generally by the teachers' mediation of the artwork. We've experienced a fair amount of resistance to new methods of

Thank you for your co-operation.

teaching, and that artwork sometimes doesn't work because it is used in a completely different way from how it was intended to be used. (I realize this is something we need to ^{try to} address within our texts.)

Appendix 3:

Aspects not included in Research Interview

The following aspects were not included in the Research Interview, but are considered to be worthy of further study, the reasons for their exclusion are briefly given:

Synthesis or incongruence of meaning between visual and written text

An incongruence or dislocation of meaning between the content and presentation of the two main elements of composite text, often results in a situation where - even if one or both elements are excellent in their own right - the reader becomes confused and meaning is lost or obscured. The converse is also true; a synthesis between the two elements facilitates the learner's process of deriving meaning from the composite text.

This important area for research warrants the additional skills and input of a second-language and content-subject learning and reading expert, and was therefore beyond the scope of this research.

Semantic interpretation of symbols, figures/objects and cultural anachronisms

It was anticipated that the semantic or symbolic meanings of certain objects, animals or figures; cultural anachronisms and cultural traditions (observed today), could warrant an entire investigation devoted to these three factors alone.

Aspects pertaining to the design and layout of the book and page

Aspects pertaining to the layout and design of the textbook, , like, i.e., 'user-friendly' pages, continuity, inconsistency etc, font size and style were not included in this research as they are considered to require logical and careful application on behalf of textbook designers, as well as feedback from the users.

Aerial and Terrain Maps, Scales and Keys

Aerial and terrain maps are an important aspect of learner's visual perceptual and spatial skills for a content subject like that of geography. This element of visual text was not included for testing as it was considered, generally speaking, that the younger children involved in this study (i.e., 8 - 9 year olds) would not have yet been formally exposed to map-reading as a learned conceptual skill. However, the ability of children to perceive an oblique aerial view of familiar subject matter was included in the Research Interview.

Pie-graphs and bar graphs

Pie-graphs, bar graphs and charts were not included in the Research Interview as they are normally introduced for learning at the senior primary level and would, therefore, not be suitable for investigation with younger learners.

Techniques for depicting shade and volume

This aspect was not investigated, strictly speaking, although the some of the questions in the Research Interview dealt with it directly, e.g. those concerning line-hatching style for rendering tone, as well as washes to suggest tone.

Appendix 4

Research Interview Questionnaire

(Space format of questionnaire was condensed for inclusion in this appendix)

Child's Name:

Age:

Sex:

Standard at School:

Name and type of school and area:

How long in attendance at this school:

Before this school (which school - for how long):

Did you go to a pre-school?

Present home area - township/informal settlement/suburb:

How long have you been living here?

Where did you live before you came here?

Can you remember for how long (or since when) you lived there?

Section 1:

Profile of Home Environment

1. Who is your favourite music star?
2. Who is your favourite leader?
3. Who is your favourite sport star?
4. What is your favourite food?
5. Who do you live with?
7. Do he/she/they work?
8. Who looks after you after school?
9. Who helps you with your homework?
10. Do you have electricity at home?
11. Do you watch TV?
12. Do you parent/s watch TV?
13. Do you have a TV at home?
- 13a. Where do you watch TV?
14. Do you watch TV every day? When?
15. What is your favourite TV programme?
16. Do you play TV games?
17. Have you got a computer at home?
- 18a. Do you use it/What do you use it for?
- 18b. Do you play computer games on it?
19. Do you have some books in your house?
20. About how many do you think there are?
21. Do you know what the books are about?
22. Can your parent/s/guardian read and write?
23. Do you look at or read these books in your house?
24. Are there any pictures in these books?
25. Are there a lot of pictures in them?
26. What are some of the pictures of?
27. Do you like reading?
28. Have you got magazines in your house?
29. What are the magazines about?
30. What kind of clothes do you like to wear?
31. Do you go to the movies?
32. Do you watch videos?
33. Do your parents read the newspaper?
33. Do you look at the newspaper?
34. Did your parents read to you from story books when you were very young?

35. Did they show you pictures in the book and talk about the pictures with you?
36. Do you like looking at pictures?
37. Which do you like the most, looking at pictures or reading?
38. Do pictures help you to understand what the story is about?
39. What is the name of one of your favourite books, comic or magazines?
40. Is there a library near to your house?
41. Do you go to the library to borrow books?
42. Are there any photographs or pictures on the walls of your house?
- 43a. Who/what are they of?
- 43b. Are there a lot of them?

Profile of School Environment

1. Do you have textbooks of your own to use at school?
- 1a. What does the teacher use to teach you with?
- 1b. Can you take your textbooks/worksheets home with you?
- 1c. Do you have to share a textbook/worksheet?
- 1d. How many must share a textbook/worksheet?
2. Are there some pictures on the walls of your classroom?
3. A lot or a few?
4. When the teacher is teaching you, does she explain to you what the pictures in the textbook/worksheet mean?
5. Do you enjoy looking at the pictures inside the textbooks?
6. Are there a lot of pictures or only a few?
7. Do they help you to understand what you are learning about?
8. Is there a library at your school?
9. Are there a lot of books in the school library?
10. Is there a public library near to your school?
11. Do your teachers take you to the public library?
12. Are there any extra books (or book-boxes) in your classroom for you to read or look at?
13. Which subject/s do you like the most at school?
14. What is your favourite sport or game?

SECTION 2

Key: Y= Yes; N = No; Un = Unsure/uncertain; Id = Identified; Not= Not correctly identified;
 #= Question for older group; Object recognition - ✓ = identified; X = not identified; ? = Unsure

1. Form perception: 1A: What is this? (square) Id/Not/Un
- 1B: What is this? (box/brick etc) Id/Not/Un
- 1C: What is this? (circle) Id/Not/Un
- 1D: What is this? (orange/tomato etc) Id/Not/Un

2. Three-dimensional depth perspective/size constancy/relative size

- 1A: What are the names of these animals? Id/ Not/Un
- (List which animal/s were unfamiliar)
- Is the lion/ess bigger than the buck? bigger/smaller/Un
- Is the buck the same size as the bird (foreground)? bigger/smaller/same
- Is the tree bigger or smaller than the lioness? bigger/smaller/ Un
- Is the giraffe bigger than the lioness? bigger/smaller/ Un
- Can you see a mountain? Id/ Not/ Un
- What are these (2 birds at the back)? Id /Not /Un

Comments:

1B 1 + 2: What do you think these two pictures are of? Id / Not/Un

Which boys in these two pictures are the same? Id /Not/ Un
 Are these people (to the left and right of boys) smaller or bigger than the boys? Sm/Big/ Un
 What are these? (clouds) Id /Not/ Un
 What is this? (centre circle on field behind hand) Id /Not/ Un

Observations:

3A. Oblique angle aerial view

Which room is this? (bathroom) Id /Not/ Un
 Repeat question (dining room) Id /Not/ Un
 Repeat question (bedroom) Id /Not/ Un
 Repeat question (kitchen) Id /Not/ Un
 Repeat question (lounge) Id /Not/ Un
 Repeat question (toilet) Id /Not/ Un

Observations:

3B: Eye-level view

What is this? (bedroom) Id /Not/ Un
 Repeat question (kitchen) Id /Not/ Un
 Repeat question (bathroom) Id /Not/ Un

3C: Object recognition

What is this? (basin) Id /Not/ Un
 What is this? (furrow) Id /Not/ Un
 What is this? (drain) Id /Not/ Un
 What is this? (barrel reservoir) Id /Not/ Un
 What is this? (toilet) Id /Not/ Un

Observations:

4A-C. Cropping

4A: What is this picture of? Id /Not/ Un
 Where is the rest of the arm? Id /Not/ Un
 Where is the rest of the leg? Id /Not/ Un

Observations:

4B: What is this picture of? Id /Not/ Un
 What is this? (water/sea) Id /Not/ Un
 What is this? (rock) Id /Not/ Un
 What is this? (starfish) Id /Not/ Un
 What is this? (shell) Id /Not/ Un
 Where is her (right) foot? Id /Not/ Un

4C: What is this picture of? Id /Not/ Un
 Where is this person's leg? Id /Not/ Un
 What is this showing you? (dream bubble) Id / Not/Un

4D-E. Foreshortening

4D: What is this picture of? Id /Not/ Un
 Where are this person's (on the left) legs? Id /Not/ Un
 Where are this person's (on the right) legs? Id /Not/ Un

4E: What is this picture of? Id /Not/ Un

Where is the person's (left) arm? Id /Not/ Un

Comments:

5. Speech balloons, sequence of comic format and character continuity

5A: What are these? (pointing to speech balloons) Id /Not/ Un
What does it show you? Id /Not/ Un
How many pictures are there here? Id /Not/ Un
Can you show me which is the first picture? Id /Not/ Un
second picture? Id /Not/ Un
third picture? Id /Not/ Un
fourth picture? Id /Not/ Un
fifth picture? Id /Not/ Un
sixth picture? Id /Not/ Un

5B: Show me which one is the first picture? Id /Not/ Un
second picture? Id /Not/ Un
third picture? Id /Not/ Un
fourth picture? Id /Not/ Un
fifth picture? Id /Not/ Un
sixth picture? Id /Not/ Un

5C: Show me which one is the first picture? Id /Not/ Un
second picture? Id /Not/ Un
third picture? Id /Not/ Un
fourth picture? Id /Not/ Un

Which one was easier for you to see the different pictures in, this one (5B) or this one (5C)? 5B /5C/ Un
Why did you find it easier?

5C: Can you see this little boy (boy with dark shorts and white top in top left picture) in the other pictures? Show me where he is.

..... Id /Not/ Un

5D: Please show me which people are in Picture 1 Id /Not/ Un
Picture 2 Id /Not/ Un
Picture 3 Id /Not/ Un
Picture 4 Id /Not/ Un
Picture 5 Id /Not/ Un
Picture 6 Id /Not/ Un

Observation:

5E: Please show me Picture 1 Id /Not/ Un
Picture 2 Id /Not/ Un
Picture 3 Id /Not/ Un
Picture 4 Id /Not/ Un
Picture 5 Id /Not/ Un
Picture 6 Id /Not/ Un
Picture 7 Id /Not/ Un
Picture 8 Id /Not/ Un

Which one is the easiest for you? (5D or 5E) 5D/ 5E

Why is it easier/a bit difficult?

6. Western pictorial symbolism

- 6A: What is this many saying? (gibberish etc) Id /Not/ Un
.....
- 6B: What do these lines here mean?
(idea - sudden mental illumination) Id /Not/ Un
.....
- 6C: What do these (jagged impact lines) here show you?
..... Id /Not/ Un
.....
- 6D: What are these little things here? (music notes) Id /Not/ Un
What does it tell you the man is doing? (whistling/singing) Id /Not/ Un
- 6E: What are these little things here? (music notes) Id /Not/ Un
What is this boy doing? (whistling) Id /Not/ Un
- 6F: What do these lines show you? (jagged explosion lines)? Id /Not/ Un
.....
- 6G: What is this? (heart) Id/Not/Un
- 6H: What do these here mean or show you about these two people? (in love)
..... Id/Not/Un
- 6I: What does this show you? (movement lines and puffs of smoke)
..... Id/Not/Un
- 6J: What do these here show you? (stars depicting pain)
..... Id/Not/Un
- 6K: What is this picture of? (boy dreaming of girl)
..... Id/Not/Un
What does this here show you? (dream bubble) Id/Not/Un
.....
- 6L: What is this thing here? (halo) Id/Not/Un
What does it show you about this boy? (good etc) Id/Not/Un
- 6M: What are these things here? (horns in head) Id/Not/Un
What does it show you about this boy? (bad etc) Id/Not/Un
- 6N: What is this here? (light bulb) Id/Not/Un
What does it show you about this boy? (mental illumination) Id/Not/Un
- 6O: What is this picture of? (man dreaming of car) Id/Not/Un
What does this show you? (dream bubble) Id/Not/Un
- 6P: What is this? (sun) Id/Not/Un
What are these? (suns rays) Id/Not/Un
- 6Q: What is this? (sun) Id/Not/Un
What are these? (suns rays) Id/Not/Un

7A-B: Arrows and direction of arrows

- 7A: What are these? (arrows) Id /Not/ Un
Show me which way the picture is showing you to look? Id /Not/ Un

Is this cow (single with udders) bigger than a truck? bigger/smaller/ Un

7B: What are these? (pointing to arrows) Id /Not/ Un

What way do they show you to look? Id /Not/ Un

Is this snail bigger than this boy? bigger /smaller/ Un

8. Graphic separation line

What does this line show you? Id /Not/ Un

(What do you think that it is?) Id /Not/ Un

What is this picture of? (cooling towers) Id /Not/ Un

What is this picture of? (girl with hairdryer) Id /Not/ Un

What is this picture of? (boy under shower) Id /Not/ Un

What is this picture of? (mountains) Id /Not/ Un

9. Spiral

Show me how the bird was flying? (spiral) Id /Not/ Un

9A-G: Implied movement and graphic symbols

9A: What do you think this picture is of? (person on bicycle) Id /Not/ Un

Are they keeping still? N /Y/ Un

Are they going fast or slow? Fast /slow/ Un

9B: What do you think this is? (lightning) Id /Not/ Un

9C: What is this picture is of? (soccer player kicking ball) Id /Not/ Un

What do these lines mean? (movement lines) Id /Not/ Un

..... Id /Not/ Un

9D: What is this man doing? (tearing book) Id /Not/ Un

9E: What is this? (lightning) Id /Not/ Un

9F: What is this woman doing? (roller-blader) Id /Not/ Un

What do these these show you? (movement lines) Id /Not/ Un

9G: What is this? (lightning) Id /Not/ Un

What is this? (rainbow) Id /Not/ Un

10. Section diagrams

10A: What is this? (ground water section) Id /Not/ Un

What is this? (sea) Id /Not/ Un

What is this? (factory) Id /Not/ Un

What is this? (boat) Id /Not/ Un

What are these? (fruit trees) Id /Not/ Un

What are these? (clouds) Id /Not/ Un

What is this? (aeroplane) Id /Not/ Un

10B: What are these? (trawlers) Id /Not/ Un

What is this? (surface of sea) Id /Not/ Un

What are these? (different fishing nets) Id /Not/ Un

What is this? (lobster) Id /Not/ Un

Where is the top of the water? Id /Not/ Un

What is this here? (underwater - white area) Id /Not/ Un

10C: What is this part here? (underground water) Id /Not/ Un

What is this? (well) Id /Not/ Un

What is this? (windmill) Id /Not/ Un
 What is this? (reservoir) Id /Not/ Un
 What is this here? (underground checked area) Id /Not/ Un

10D: What is this? (water surface) Id /Not/ Un
 What is this? (underwater) Id /Not/ Un
 What are these? (bubbles) Id/Not/Un
 What is this? (birds) Id /Not/ Un
 What is this here? (seaweed/coral) Id /Not/ Un

11. Grainy photographs

Which picture has the most trees and bush in it? A / B/ Un
 Which picture is of a hot and dry place? A / B/ Un

12. Geographical drawings and cross-sections of mountains

12A: What is this? (sea) Id /Not/ Un
 What is this? (tarred coastal road) Id /Not/ Un

12B: What is this? (mountains) Id /Not/ Un
 What is this? (two rivers joining) Id /Not/ Un

12C: What is this? (grey cross-section of mountain range) Id /Not/ Un
 What is this? (white surface area of mountain range) Id /Not/ Un

12D: What are these? (mountains) Id /Not/ Un
 What is this? (river) Id /Not/ Un
 What is this? (sea) Id /Not/ Un

#12E, F, G and H: What is this part here? (light & dark grey areas - cross sections of plateau etc) Id /Not/ Un
 What is this part here? (light areas of surface of mountain etc.) Id /Not/ Un
 Have you seen them before? Y /N/ Un

13. X-ray internal views

13A: What is this picture of? Id /Not/ Un
 What is this here? (bones in left leg) Id /Not/ Un
 What is this here? (muscles in right leg) Id /Not/ Un
 What is this? (skull) Id /Not/ Un
 What are these? (eye-sockets) Id /Not/ Un

13B: What is this? (x-ray view of unborn baby) Id /Not/ Un
 Does it belong to this woman? Y /N/ Un
 Is it inside her or is this a picture outside her body? Id /Not/ Un

13C: What do you think that this looks like? (lungs etc) Id /Not/ Un
 Is it inside her or outside of her? Id /Not/ Un

14. Magnification and reduction

14A: What is this? (cat) Id /Not/ Un
 What is this ? (claw) Id /Not/ Un
 Does it belong to this cat? Y / N

14B: What is this? (dinosaur) Id/Not/Un
 Is it big or small? Big/Sm
 Very big/very small? V Big/V Sm/Un
 Is it as big as your hand, or is it as big as your house? hand/house//Un

14C: What is this? (dinosaur) Id/Not/Un
 Is it big or small? Big/Sm
 Very big/very small? V Big/V Sm/Un
 Is it as big as your hand, or is it as big as a house? hand/house/Un

14D: What is this? (dinosaur) Id/Not/Un
 Is it big or small Big/Sm
 Is it very big or very small? V Big/V Sm/Un
 As big as your hand ... ? Y/N/Un

14E: How big is this (dinosaur)? Un

 Why do you say that?

15. Overlapping/superimposition " You are standing here and this picture is in front of you - [is the ... etc.,] "

15A: If you are standing here and this picture is in front of you, is this girl (with plaits) standing in front of or behind this boy (with baseball cap)? Behind/Front/ Un

15B: If you are standing here and this picture is in front of you, is this sheep (on the left) next to or behind the cow? Behind /Next/ Un
 Is the cow in front of the sheep? Y /N / Un
 Where is this the rest of this cow? (on the right)

 Is it on top of or behind the rocks? On top /Behind/ Un

Object Recognition

✓ X ? fish	✓ X ? bird
✓ X ? chameleon	✓ X ? butterfly
✓ X ? dividers	✓ X ? egg
✓ X ? watch	✓ X ? toothbrush
✓ X ? spanner	✓ X ? ink bottle/bottle
✓ X ? bulldog/paper clip	✓ X ? pine cone
✓ X ? prawn/shrimp	✓ X ? leaf
✓ X ? pot plant	✓ X ? screw
✓ X ? lizard	✓ X ? scissors
✓ X ? needle	✓ X ? acorn
✓ X ? caterpillar	✓ X ? nail
✓ X ? toadstool/mushroom	✓ X ? rat/mouse
✓ X ? seed	✓ X ? frog
✓ X ? pencil	✓ X ? carrot
✓ X ? spider	✓ X ? reading glasses
✓ X ? ladybird	

2nd page

✓ X ? loaf of bread	✓ X ? sweets
✓ X ? fish	✓ X ? apple
✓ X ? mielies	✓ X ? orange
✓ X ? chips	✓ X ? eggs
✓ X ? jam jar	✓ X ? cake
✓ X ? binoculars	✓ X ? ice-cream sundae
✓ X ? milkshake	✓ X ? can of cooldrink
✓ X ? candyfloss	✓ X ? bird in flight
✓ X ? fish swimming	✓ X ? mammoths

3rd page

✓ X ? snail	✓ X ? mussel shell/shell
✓ X ? octopus	✓ X ? slug
✓ X ? springbok/ buck	✓ X ? zebra
✓ X ? cow	✓ X ? horse and foal
✓ X ? buck	

4th page

✓ X ? boy swimming
 ✓ X ? view of buildings through window with bird
 ✓ X ? single mountain
 ✓ X ? mountain
 ✓ X ? bird's nest
 ✓ X ? airport/scene
 ✓ X ? aeroplane
 ✓ X ? buildings
 ✓ X ? windsock
 ✓ X ? weathervane

5th page

✓ X ? car	✓ X ? bus
✓ X ? boy and girl dancing/jumping	
✓ X ? cat	✓ X ? dog
✓ X ? monkey	✓ X ? pig
✓ X ? house with child in doorway	✓ X ? chair
✓ X ? aeroplane	✓ X ? church
✓ X ? cargo ship/ship	✓ X ? aeroplane
✓ X ? goods steamtrain	✓ X ? wheelbarrow with bricks
✓ X ? truck	✓ X ? passenger bus
✓ X ? tractor with cart	✓ X ? delivery bike/motorbike

6th page

✓ X ? necklace and/or neck	✓ X ? nest/in tree
✓ X ? fruit	✓ X ? horse
✓ X ? goat	✓ X ? rabbit/hare
✓ X ? hippopotamus	✓ X ? flag
✓ X ? envelope	✓ X ? suitcase
✓ X ? postman and dog	✓ X ? stamp
✓ X ? cow	✓ X ? monkey/baboon
✓ X ? drums	
✓ X ? mice/rats	✓ X ? steamtrain/train
✓ X ? chickens/chicks	✓ X ? guitar
✓ X ? wall postbox	✓ X ? snake/python
✓ X ? elephant	✓ X ? mouse/rat
✓ X ? frog	✓ X ? owl
✓ X ? hen/chicken	✓ X ? bat

7th page

✓ X ? city/Cape Town	✓ X ? yacht on sea
✓ X ? suitcase	✓ X ? shoes
✓ X ? carcass	✓ X ? inside of <u>cave</u>

8th page

✓ X ? mielie plant	✓ X ? mielie cob
✓ X ? taxi/hi-ace	✓ X ? motorbike
✓ X ? taxi	✓ X ? bus

✓ X ? fire engine

✓ X ? car

9th page

✓ X ? tortoise

✓ X ? snake

✓ X ? bat

✓ X ? ostrich

✓ X ? lizard

✓ X ? lion

✓ X ? shark

✓ X ? rooster

✓ X ? guinea fowl

✓ X ? frogs

✓ X ? eagle/bird

✓ X ? baboon/monkey

✓ X ? fish/salmon

✓ X ? fish/trout

✓ X ? rabbit

✓ X ? crocodile

10th page

✓ X ? man in the moon and stars

✓ X ? bird

✓ X ? snake

✓ X ? elephant

✓ X ? monkey

✓ X ? fish

✓ X ? dog

✓ X ? fish

✓ X ? hippopotamus

✓ X ? bird

11th page

✓ X ? hippo in water

✓ X ? light bulb/globe

✓ X ? boiling pot

✓ X ? animal skull

✓ X ? girl with pipette

12th page

✓ X ? sand-dune/desert

What is this? (space rocket taking off) Id/Not/Un
What is this? (moon and rocket in orbit) Id/Not/Un
What is this? (earth) Id/Not/Un
What is this? (moon surface) Id/Not/Un
What is this? (space-craft) Id/Not/Un
What is this? (space-man) Id/Not/Un

13th page

A: What is this? (ostrich egg/egg) Id /Not/ Un
B: Is this man short or tall? (short-pygmy) short/tall/ Un
Why do you think so?
.....
E: What do you think this is? (inside of Congo Caves) Id /Not/ Un
.....
F: What is this picture of? (mountains with melting snow caps)
..... Id /Not/ Un
(What is this part here? (snow)) Id /Not/ Un
(Have you seen it (snow) before?) Y /N/ Un
H: What do you think this is? (lake) Id /Not/ Un
What do you think it is? Id /Not/ Un
I: What do you think this is? (mountain) Id /Not/ Un
Can you see what these are? (pointing to elephants) Id /Not/ Un

J:	What is in this picture? (camels in sandstorm)	Id/Not/Un
K:	What is this picture of? (sun)	Id /Not/ Un
	(horizontal lines = wind?)	Id /Not/ Un
	(mountains)	Id /Not/ Un
	Do you think it is hot or cold?	Id /Not/ Un
L:	What is this man doing? (playing cricket)	Id /Not/ Un
M:	What is this man doing? (surfing)	Id/ Not/ Un
N:	What is this person doing? (scuba-diving)	Id /Not/ Un

Photographs

Clouds over landscape	Id /Not/ Un
Waves crashing and washing over rocks	Id /Not/ Un
River	Id /Not/ Un
Small sand dune with vegetation and mountain	Id /Not/ Un

Stylistic Preferences and Interpretation

1. Which of these three pictures (1A, 1B or 1C) do you like the most?	1A/ 1B /1C
Why do you like this one the most?	
Why don't you like this one? (1A/1B/1C)	
Why don't you like this one? (1A/1B/1C)	
Do you like this picture? (1D)	Y /N /Un
Why do you like/not like it?	

2. Line hatching

2A, 2B + 2C

Do you like these pictures?	Y /N/ Un
Why do you say that you like/dislike them?	
.....	

3. Silhouette style

3A: Do you like this picture?	Id /Not/ Un
Can you tell me what this is? (rabbit)	Id /Not/ Un
Can you tell me what this is? (sun)	Id /Not/ Un
Can you tell me what this is? (tree)	Id /Not/ Un
.....	
3B: Do you like this picture?	Id /Not/ Un
Can you tell me what this is? (man)	Id /Not/ Un
Can you tell me what this is? (bag)	Id /Not/ Un
Can you tell me what this is? (arms and legs sticking out)	Id /Not/ Un
Can you tell me what this is? (house in background)	Id /Not/ Un

.....

4. Stylization and realism

Which pictures of these people do you like the most? (4A or 4B) 4A/4B

Why do you like these people the most?

Why don't you like the other people so much? (4A/4B)

5. Photographs and realism

Which faces do you like the most of these two? (5A or 5B) 5A/5B

Why do you like these people the most?

Why don't you like the other people so much? (5A/5B)

6. Crisp realistic style and sketchy wash realistic style

Which people do you like the most, this one (6A) or that one (6B)? 6A/6B

Why do you like these people the most?

Why don't you like the other people so much? (6A/6B)

7. Cartoon caricature and realistic figure

What are these people doing? (playing soccer) Id/Not/Un

Which one do you like the most of these two? 7A/7B

Why do you like this one the most?

Why don't you like the other one?

Appendix 5

Transcription of Recorded Interview with Publisher One

(A subject editor (a) and an art designer (b) were interviewed at the same time.)

Q: What problems do you encounter and which areas do you feel would be priorities for research. You mentioned that you felt that people latch onto things without there having been substantial foundational work behind it.

- a. Problems in getting appropriate illustrations in the field. Very nasty problem to deal with, tight schedules, tight budgets. Problems that are not acceptable that we need to look very hard at and somehow change. Lack of skill in illustrators, a lack of knowledge in the publishing industry.

What it boils down to is that we are not being able to do as much research as we would like to. Deadlines and budgets get tighter and tighter. We are not even able to use the skills really that we potentially have. We have enough skills and experience to put together very good books, we are aware of these problems but we still are not doing what we can. Certainly the second language material will be thoroughly trialled. Our one problem in the past has been that it is a very competitive market, financially - competing books cost very little. It is quite difficult unless you have a big stack of money to invest an enormous amount in the development of a book. But it must be done we just have to find a way of doing it. The answer is to sell more books and get a bigger share of the market. Put in the research get it right, sell more books.

Q: What do you think visual literacy is?

- a. The ability to read or understand the images of the text on a page. Making sense of illustration and making sense of page layout, the sequences of things on a page, headings on a page, headings and sub-headings. Why is that one big and fat and that one small.
- b. More to do with what the awareness the reader brings to their book. Obviously it is a skill. A reader who has minimal exposure to graphics, in a rural area. The quality of visuals that they are exposed to.

Q: How informed are your artists of visual literacy? How aware are your artists of the problems the readers might have with visual literacy?

- a. To a certain degree probably not entirely. X (art editor) has a pretty sharp awareness.
- b. Some of the illustrators I think are quite aware but problems still crop up. They have a lot of training. They go to Tech training which is a commercial orientated illustration course. I don't think the artists are aware ... we can point it out to them, the problems that they may have. My knowledge is based on research that was done 20-30 years ago (Fuselgang). We are not dealing with kids with that absolute lack of exposure. We have a very mixed market where people are exposed to a lot of western conventions, I think it would be simplistic to say this is African and this is Western. Those borders have fallen away, billboards, television, everything. Every product you use in your house is a visual product.

Q: How were you operating, from what foundation? What consultation do you have with the children, I realise that you have a problem with time and money.

- a. Let me start with the future, the entire primary English second language course will be trialled properly. The past is not quite so glowing. There are a lot of problems. It is a widespread problem and I don't think anybody is tackling it properly.

Well judging from results we don't know what goes on behind closed doors from the other publishers. We see their product and we see a lot of research that could have been done has not been done.

I think we are now in a stage where we can make books which look much more progressive, fresher, more humorous than in the past. They are still really not much better than they were. A kind of superficial improvement which is easy to achieve, because teachers will recognize these books as being more joky, more colourful, cleaner looking and so on. But I think in terms of actually working in the classroom, not enough work has been done by a long shot.

Q: So the research you are going to be doing with the English second language material is going to be trialled quite

thoroughly. So the product will be quite new in a sense in that you will have really tested the materials?

- a. Visual literacy is an aspect that we will play quite strongly on. Later in promoting the course, it will be one of the features that we can say that it does have.

I recently read an article which said that literature for black people, should be written by blacks, chosen by blacks, drawn by blacks, do you agree with that?

- a. In an ideal situation yes, but I think that a lot of affirmative action needs to be done. Training people, giving them the skills to be writers and developers of materials, illustrators and so on. I am sure, I know that the potential is there.
- b. It also does not have the depth or specialization that you might have in other parts of the world. You rely on a smaller pool of expertise, those experts might be good educationists but they might be poor writers.
- a. You get just as many terrible stories from whites with university degrees. So it is not a racial thing, it is just the size of the pool, I think. Mostly I find that children want more modern stories (in relationship to their lives).

Q: Are you aware of the whole eurocentric thing, in other words what we have is very familiar to us, but may be foreign to others?

- a. I think the whole thing of culture, language and visual literacy is hugely complex.

Q: A very broad question. We are now entering into the whole multi-cultural phase in education. Your children probably have had a large amount of pictorial stimulation. A black child probably would not have had the same experience, and they are both placed in the same classroom situation, how are you as a publisher going to use your commissioned material, or in editing material, how are you going to take this into consideration? This is something publishers are going to have to be aware of now.

- a. Yes, you're absolutely right. I would very basic I think as far as possible, I think that is the only way to go, as far as compensation for the past, and I think that there are some sacrifices on advantaged kids part. They can get it at home, whereas there is that huge number of kids who are at a historical disadvantage.
- b. You can build in safe-guards, I don't want to give away company secrets. The way you work is to build in as much pointer material in the text. So that you can use the textbook as a cortex, but from that textbook pointing kids towards supplementary information. You know how to use a library, play games, whatever. We put in as much reference or background material to try to contextualise the idea. We don't just put the idea down, but build around it. Likewise for the teacher it is not pupil-centred but into our pupils books we put in a lot of information that only the teacher would use, which provides background.

Q: Do you feel that illustrations, graphics, diagrams are one of two elements in a book. In the past I found that people regarded the illustration to be very much subordinate to the text, you would have two pages of text with a little diagram stuck in somewhere. Whereas now I find there is more of a strong interplay,

- a. They are definitely equally important, again connection to each other is usually crucial.
- b. I would say have a look at the books and answer the question for yourself.

Q: Do you feel that up until recently illustrations have been left up to the artist's discretion with a bit of intervention from yourselves, being publishers or editors?

- a. I think in the past the briefing has not been nearly precise enough. X (art editor) is very precise with the briefing, both on a technical level, and in the content and pushes editors to produce more information. Ja, it has been a problem.

(Interview finished)

Appendix 6

Transcription of First Recorded Interview with Publisher Two

(Two separate interviews were conducted with personnel from this company. The second was conducted approximately 6 months after the first)

Q: I want to ask you briefly what sort of problems you encounter - which areas are priorities for research?

It is actually very difficult for me to answer because I would not want information from the company to leak to other companies, because everybody is doing research and we need to try and get the competitive edge. There are different areas and I expect you will hear it from the same publishers. But I think that the prioritising of it is something I think I can't divulge. It is very 'closed doors' in a way and the research we are going to be embarking on comes in different phases. We need to look at the needs of the different classroom situations as they come through in terms of language, multi-lingual, multi-cultural and the visual literacy. So it is everything.

Q: When you talk about visual literacy, are you talking about skills ability of children?

Yes, skills ability. So you are looking at the different skills, language, visuals, readability of text. Also it comes right down to the micro situation of the typesetting whether it facilitates the handwriting syllabus for instance, even right down at that level, when they first start writing.

Q: So you are looking at continuity?

That for the people, and then for the teacher you are looking at the same thing, but on a different level. But in terms of the priorities I would prefer to keep that quiet.

Q: That is fine, I respect that. Visual literacy is a very broad term which is bandied about a lot now, what do you feel visual literacy actually is?

What I think is important is that any artwork within textbooks (relating this back to textbooks) should be integrated with the text so that it is easily accessible, so that when a person picks up a book even if it is just a picture book - the child must be able to relate to the picture and understand it. But it is also important to stretch the child and teach them new skills for what they are looking for. So what you have to deal with is the immediate but also the extras which a teacher will coach them along with. If it is a book to be used on its own hopefully it will be used in combination with teaching or something in the school, sort of like stretching the skills to be able to identify what is being taught. Then as the artwork is being used within the books with text, then you are looking more at integrating it. They can look at a picture and understand it and through understanding the picture they will be able to understand the text. I would like to go with that. People who are better at reading can identify a picture, and people that are better at identifying a picture can understand the text better.

Q: Your artists are they briefed, workshopped or whatever, in terms of visual literacy?

I would hope that any publisher does this. It is policy that author's should supply an artwork brief that goes with their manuscript. The editor goes through that and pads it out substantially, reference material put with it for the artist. When the editor is briefed they know exactly what is expected of them and if it comes back then they have not been well enough briefed. Obviously artists don't want to do exactly what the brief tells them because it restricts them and they want to make this more aesthetically pleasing. We have to pull in the rein the whole time and it is difficult to find people who are prepared to put up with that. Because a lot of artists - they work for a year or two to make money out of a publisher and then they say they can't be bothered with this because it is so prescribed. Artwork briefs have to be precise and they have to be trained. Artists should look through the brief and work according to that. Sometimes they do not even do that they read through the manuscript and they'll do what they feel and they'll come back and we will reject their work.

I'd like to come back again, I accept the part of the brief, are your artists really taught about the visual literacy abilities problems a child would have, including cultural meanings, of things we would just gloss over. Understanding of things, and picking up things we would not see, and vice versa we would understand things from our own pictures that they would not see.

Q: I would hope so.

I asked you are they?

Q: Well, I wish you would speak to the artists themselves. From my perspective I am going to say yes, because I feel they are but, then when something goes wrong, then there is something obviously very wrong with what is even being portrayed, or their perception, so we have to look into that. But I am more and more happy ... certainly in the past they may have got it wrong .. but in the here and now. After materials come back from trialling, they will get to see all the comments, so even if they were quite happy with the picture, why is it being rejected. There are comments from the teachers, from the pupils and then they get to understand the classroom situation more. You find though as you speak to artists that they are getting more and more interested in the whole thing and they will go into classrooms and a lot of them tend to have young children, so they certainly want to make textbooks look better. So they will go into those schools. It has become second nature for an editor to fully brief and educate them.

Q: To what extent do you use on the ground consultation, research, workshopping or whatever you wish to call it for your materials?

Well (a relation) is largely with the marketing department of our teacher training division, in English strictly. They also employ teacher trainers, in subject areas and teach them and train them with books.

Q: Are you satisfied that they are fully trialled?

Not yet, no, this is the beginning. We started a couple of years ago but this is really the beginning. Some publishers are rejecting the idea of going out and trialling. They feel that the author's know what they are doing otherwise they would not have been commissioned to write the books.

Q: What about the commissioning editors, have they experience of black culture?

Well, more and more we expect people to have a certain background knowledge of what they have already experienced. So there are some people who we have in publishing employed by us. The ones that have not had are getting in-service training and networking. So its not just seen as a business role, you get the commission and go out and get the bucks at the end of the day. It is actually knowing more and more what is happening. It is very difficult because I have not been here all that long, so from my perspective that has always been happening, but if you get someone who has been in the trade for 50 years, does it matter. Our research will become much more structured. The whole human resource management side of the company is becoming much more structured. And the research is something which is going to be paramount.

Q: I read a statement written recently by a black educationist, that literature for blacks, should be chosen by blacks, and written by blacks and illustrated by blacks?

I think it depends what you are dealing with. When you are working with a publisher it is a commercial venture, so you've always got to look at what is going to sell at the end of the day, to be quite honest about it. If a black team, and you could find the people for that team, which is happening, then great but, similarly here, people are humans. I think the skin colour and language barrier has got to be overcome and people can work in teams. We are dealing with an integrated society so you can't make your book so separate. If you do that you are just going to add to a segregated society. The integration of society affects the integration of author teams, it affects the micro and the macro. If you speak to people that deal with African languages publications you might have one white person on the team who is a very experienced author, coming from that perspective and then somebody else who has more teaching experience, be he white or coloured or indian or whatever. So you looking at skills within a person rather than the colour of their skin. It is difficult trying to sell that to some people might be difficult, some have the attitude that they don't want to be told by a different skin colour what they should be doing. But I would say that the next generation coming through should be able to overcome that.

Q: Are you conscious that Eurocentric imagery and western conventions may not be familiar to black pupils due to their lack of exposure during their pre-school and formative years?

On an ongoing basis. Every kind of manuscript that comes in we will look at it in terms of whether we should publish it or not in terms of who the market is and if it does matter. Recently a book came in and some said, No it is too eurocentric, but why does that matter if it can sell in the CNA. You cant just because it is eurocentric. You have got to look at what the requirements of the market are and make the best books for the market. It is very simplistic to say that because then you might think it is not accessible to other people. Make another book which is more accessible, but then you don't want to split them, you want to make it accessible to everybody. But more and more find this difficult. Recently there were publishers and teachers at an education conference, there were people from different departments saying that they would like to see publishers producing books with translations of all the 11 languages, in the country, within them. Can you imagine how big the book would be if we were supplying everything for everyone all in one book? Which would mean culturally you have got to cover every ground. In your language you have got to cover every ground. It is impossible, but we are going to go as far as we can to integrate. And that's another area of research: It's been looked at in all levels throughout society. One place it is

being looked into in great extent is in the SA Publishing Association and they are really doing a lot of work. IPASA.

Q: Do you feel that the illustration or diagram is one of two elements and that the cooperation between the two is very important?

It has got to be useful. Sometimes we get manuscripts in with illustrations that are completely irrelevant to the text. It can distract children to such an extent that the lesson is completely null and void.

Q: I would like to come back to the whole area of co-operation between the author and the artist. To what extent do you feel that, that relationship is important? I feel that this is where the whole thing breaks down, I could be very wrong.

It's a shame that you don't know a little bit more about the processes of publishing. Some publishers commission authors who really want to be involved very heavily in their artwork. If the publisher is inexperienced they will say, okay, go ahead submit your manuscript together with your artwork. It comes and it gets to editorial and it does not work with the text, but we can do nothing about it because it has got to go off within three weeks. And it is very, very dangerous. Having said that I think that a manuscript should come in with an artist's brief with as much reference material as possible. Ideally you should be in a location where the author is close by and can actually sit with the artists and go through. An example is in a technical book, like woodwork or craft, the author goes through the drawings and sees that the direction of the grain of the wood is wrong, something the artists could not understand. If you're working at a distance it is difficult because they are not there, but what we do, and this is what we have been doing recently, is that we are flying authors in. All the feedback work will have been done, everybody will be there, the artist, the publisher and the editor will be there and they will go through every single piece of artwork. We are fortunate in that management is very open to this sort of thing, whereas in other companies they might not be prepared to fly people around and this sort of thing, but they are sensitive to the needs of the market.

Q: A target group of users, obviously you have specified areas, you have an urbanised child and a rural child, there is a certain amount of difference between their needs. How are you as a publisher going to ensure that ...

This sort of work is happening at the moment with trialling.

Q: Your feeling then is trialling, your answer then would be trialling? Are you of the opinion that very often the textbook is sometimes the only book that black children are going to be working with, in that they do not often have access to story books?

Quite often it is not even textbooks it is just the materials the teacher brought together from the syllabus. Some of the materials that the teachers are using are invaluable for our textbooks, and please bring it in. Quite often the children will not even see a textbook, only just use what the teachers have developed themselves, and that is very dedicated teachers.

Q: Black children obviously desire to learn English, and it will be within a Western education system, at the same time one wants to preserve a cultural identity ...

It is interesting, that is another question, is that what they want? Some people would argue that it is not what they want. So it is another area for trialling, I am afraid. If you look at other places where we have been publishing in the past I would say it is a bit more progressive than that. A lot of our materials went up there recently and there was a feeling that, by the author, that certain things have to be localised, everything has to be, and that is what they were going to relate to and when they got to the trialling teachers were saying, no, but now we want some international things in here.

People were going to kick certain crayons off the front of the book, because these are not available in (country's name). No, so what if they are not available in X (neighbouring country), give them a global vision. We've always got to be ready to be adaptable. It is being admitted by a lot of educationists that publishers do have a lot to offer to the changing dispensation of education, in terms of what their perceptions are but also at the end of the day, it is until the new dispensation comes through. Educationists are going to say this is what we want, and that is the curricula and take the requirements, but until that time it is a difficult question.

Q: I just wanted to know if it was something you were bearing in mind?

Oh definitely.

Q: I read a statement recently that the (child's) storybook is a sophisticated, provocative cultural product, would you agree with this?

Sophisticated, (touching a book) I think it is a pity that it is sophisticated because it should be easily accessible. If it is too sophisticated you might find that some people would run away from it. Yeah, some children would rather want to watch

television than read a good book, or a comic, because they feel a bit daunted by the prospect of reading a book. So if it is too sophisticated they may feel that it is difficult to use. Provocative, I think it should (be) provocative, I think all books should do it whereas all books do it. Provocative in the same way that a movie will be provocative. Cultural product ...

Q: In other words it is produced and written largely by whites and as such is a western product, which will include our thinking and we are giving this to people who have not had the same experience ...

True, I think a lot of people would find it difficult to relate to any book not written by a white because they are used to it is a convention. While a lot of the products that are coming out of the different countries, and it is written in English but by black people whose mother tongue is not English. The culture within it people cannot relate to. Some people have trusted in it but on the whole people have to read about it themselves, they have to read what is going on. And if you talk to people who are publishing black literature they are never going to be accessible internationally because the languages are n't. Whereas when they are translated to English there are cultural difficulties. Some people are going to be intrigued by the cultures, the main people who are going to want to read about that are the people themselves, or they are just interested in a specific region. It is interesting that a lot of the literature that comes out of Africa sells in the States, it is because a lot of people in the states want to find out where their roots are.

The tape finished at this point.

Second Recorded Interview with Publisher Two

During the discussion prior to the intended interview, it was decided by the researcher to record the conversation, with permission from the interviewee and include it for transcribing.

How we see that role is a very developmental role and we feel that everyone involved in putting a book together has to have that knowledge. So our research and development manager does in-house training. She does training with the designers, with the editors and with the publishers, and gives feedback to the authors as well, because we feel, I mean there are two aspects to visual literacy. One is, the actual piece of art you see, or drawing or illustration, but the other aspect is, that it links into the text. So that development and that support and training should go right to the authors, because they need to develop their text in a particular way.

Q: In terms of ...

The visual is integrated with the text, we see that as important for us.

Q: I have noticed that a lot of other companies are moving in this direction a lot slower than X (that publishing company), who have really established this very firmly.

Ja, I don't know why this is, it is probably because I come from a teaching background, then editorial and then publishing, and now I am the MD. So it is important for me because I still see myself as an educator I suppose and that is why I was quite aggressive about it and insisted upon having this unit set up and things like that. It is a non-profit unit in the company. (noise distortion-tea tray, unable to decipher voice) I think some of the publishers feel that, that is not really the direction they want to go in, but we see it as a long term thing for education and for us. Because at the end of the day you can't measure how much income it is generating, but it will ...

Q:.. it will, bring a lot of credibility to the work you are doing.

I don't know if you've seen our new history books?

Q: No I have n't.

This one is for us not ground-breaking stuff, because this has not the whole route that we want to go, in terms of all the training and development, testing, working closely with the editors and that kind of thing. The one thing that we wanted to achieve with the book in terms of visual literacy, was to do with time-lines and that sort of thing, we felt that children remembered things and picked up things if they are interacting with it visually. The pictorial message, we tried to do that as much as we could in the book, and it is actually working quite well and the book has been very well received. If you want to you can take that away.

Q: Thank you very much.

You can look at it in more detail. You will see that if you want to start reading it, that we start introducing things like map-work and so on, we have some characters in the book who explain to the children how to interpret the maps. So we don't just put it there and leave it to the teacher, to work out how it should be used, and what it means and that kind of thing.

Q: I really like this.

We have tried to create a balance between the aesthetic and also the practical text oriented. Because that is another mistake, even we have made that mistake, as well, everyone has, where you think, OK, now we must go into visuals, and put visuals everywhere that you can, and it gets very busy, then actually interferes with the educational process sometimes.

Q: Definitely.

We tried to avoid that as far as we could. The other thing that we found in our testing is that a lot of visuals are presented from a very adult centred perspective. And that ... (distorted) ... puts the child up ... (distorted) ... we are talking about early humans for example, we tried to put early human children in and get them to carry their suggestions, and so that the children will relate to them and there will be empathy.

Q: I find a lot of other books - they would n't actually make the child dark-skinned. They would have curly hair, with negroid features, but white (skins), I think this leads to a lot of confusion.

I think publishers are wary of taking a plunge. You can't carry on like that indefinitely, so we try as far as possible to actually do what we really feel should be done. And also the way that we have done the layout of the book, you will notice that it does not run on the way old textbooks used to. We have worked in spreads. So what it means, that what begins the top of the left hand page, kind of ends at the bottom of the right hand page, or goes on to two whole complete spreads. So for the children, what they see is a whole unit.

Q: Your department (research and development) how long has that been going for?

A year and a half.

Q: How do you conduct the research, as such, the trialling, do you go out into the classroom situations, and then ask the children, and then through that process ...

Yes, what happens is that the authors write some sample material, that the researcher and I - because I've got a big interest in this -, and we work very closely together, and the researcher and I look at this, look at language level and think about the visuals and then we re-work it. And then we have it edited and typeset and we use that as our testing material.

Q: So that is the text ...

Yes, text with visuals. It is a sample design of what the book will eventually look like.

Q: Already, both together (text and visuals)?

That is why we work on it together. Because I am quite strong visually and she is quite strong on the language side. They are put together, here in-house by the people who will actually be working on the project. That is why I did not want to set up a whole unit for research and development. I do not want a research and development designer and a research and development editor. I want the people here to learn the skills, so it goes to the editor and the designer who will ultimately work on it - like what happens with that and then they may take it to completion and prepare the spreads for us. We then take those for sampling to schools, that get selected. We try to get a cross-section in terms of a rural, urban and ... even with this rural and urban, different kinds of schools in terms of their privilege and their equipment and teacher training.

Q: One textbook would be able to double-up in a sense ...

We try very much to do this. We don't believe we should be developing books specifically for rural and specifically for urban. We feel both have something to offer as well. We feel urban children need to know about rural life and vice versa, so we don't develop in that way. So then we test the material, the researcher personally tests it. Getting people to help her sometimes if we need translation and that kind of thing.

Q: Is translation an important factor for you?

It is quite important when we are testing, because we find that a lot of the children in the schools at the moment, and teachers,

especially in the primary schools, don't have a good command of English, and that's a big barrier in terms of language and visuals - they can't interact with it. So we allow that kind of ...

Q: So that it is not intimidating for them ...

Yes, that's right, so we would take someone along who speaks the language, the main language of those children, home language and then they help us. We start off by talking about it in English, but if we find that if there is a barrier, we then interject and bring in some mother tongue. So the researcher makes detailed notes, we tape all our research, she comes back and goes through it all, in a structured, detailed way and then makes recommendations about what worked, what did n't work. She then puts all that feedback together, then she has sessions with the editor, the designer and with the publishers. The publishers, are the commissioning person who works with the authors. She works with all of them, so that the feedback goes to the authors and goes in-house, and then the rest of the writing is based on the information that we collected. The manuscript is re-worked, re-edited and re-designed and then the book is actually put together.

Q: It is very heartening to hear this. It seems to me that this has been where a lot of the breakdown has happened in terms of textbook production and children's books. The author's write excellent material, might go and trial it themselves, and then they give it to a publisher who then just commissions an artist, whose work they like, but they don't know ...

I think eventually other publishers will do it as well. They kind of have to, but we are also part of a big company, so maybe we can afford it. But there are many other big companies who could afford to, who don't as well. So we are quite excited about it, we feel that it is going to have a huge impact on learning and ... (distortion) ... in the country.

Q: On geography stuff, and then we are moving onto the history. And also a much more basic level than that, in Std 2 or Std 3, and the designer and the editor had put together some artwork based on what the researcher and I had said. We want to illustrate these things and this is how the page should look and then put a whole lot of objects together that the children has to identify them. But it was not in perspective and not in relation to real-life differences in sizes, and we found that children had difficulty in that they could not understand why, for example a house, would be the same size as a giraffe, I mean that's not a good example ... or a person. Because then you are showing it on the page, but the problem publishers would have with those kind of things, is that you cant always show it, because then the person would be too small for the child to be able to identify what it is. So, then there are all kinds of techniques that we then have to come up with to help with that. For example separate these objects in some way, so that we could try to show the child, that we are showing these objects and not the relationship between the objects. So there are all these little details popping up every time that you think, that now you've got it, something else comes up or there is something else to consider. I am trying to think of some other interesting examples. We had another example on science that we did, where we wanted to show water and evaporation. So the researcher and I worked it out very carefully and we had a series of pictures that would show, because originally the authors just had one thing, like a puddle and then there was no puddle. We showed it right from the beginning in about six stages. But, what we had forgotten to do, on the first picture, we showed a pool of water on the ground, and for us as adults it was quite straight forward what it was. And the first time we tested the children had no idea what it was ...

Q: it could have been a hole ...

it could have been a hole, it could have been oil, which then would n't evaporate, it could've been sand, they could n't tell the difference because they often cant tell texture especially if it is on the page. If we show them oil and water then they know, but for them it is just a blob of something. So then we had to come up quickly with an idea, so we showed them a jug then, just simply pouring the water onto the ground. Then all children knew immediately what it was. It is so easy to take things for granted. And that is what the testing thing is, as the months go by we just realise more and more how extremely important it is.

Q: So your involvement, you have been a teacher, obviously then you are very conscious of the problems, and this has sort of lead you into examining visual literacy in the way that you are, now, with your research and development section, am I correct there? I have got some questions ...

If you want you can ask them ... because we don't think we are that good either. Because as I say once you start scratching the surface all kinds of things come out - and then to produce the perfect book, I mean I don't think its possible. Where every single illustration is integrated with the text and put across in the particular way, that it should be and so on, we don't think that we are there yet. So I think we are still learning, as we go along and we make lots of mistakes and we also can't really afford, in terms of our publishing program, to spread what we are doing right across all our subjects, all levels, so for example, we are neglecting secondary stuff.

Q: Being ...

Secondary school materials. We feel we have to identify particular areas, or then we will have to hire ten researchers, so we

are focusing on primary because we think that is very important - but then this whole thing about, while we are researching and getting feedback, developing in-house people does have an impact on secondary stuff as well. So there is a certain awareness being developed amongst our editors, designers and publishers and they try to implement it as far as they can. By no means would I say, for example, that I am happy with our secondary school biology stuff. I think biology is a particularly important area, and physical science as well where visual literacy is just so important. We are starting to get higher, scientifically and technically, and because a lot of our children have language barriers as well, get lost. I mean a lot of schools do not have apparatus for science and they rely on the visuals in the textbook to explain to them what the experiment is all about. So that it is even more important for the textbooks to actually take cognisance of that and be done correctly from the beginning. And not enough is being done in those areas.

Q: And with the primary areas, they don't deal too much with science ...

They do science, but they don't do the heavy scientific stuff, but the basic concepts and so on are being dealt with. Aerial stuff, volume and mass and that kind of thing. We've been doing testing in our maths, we are doing it in all of our primary school subjects. So we feel quite happy about that, so there is a balance in terms of the overall skills of the child being developed.

Q: Very basically, in your opinion what is visual literacy?

For me, for the child, I always think in terms of the child, because that is the area that we work in and that is our market, and we have certain responsibilities. It is the child's ability to interpret visual text. We call everything text, there is written text and visual text, I would n't call it art or something, it is text because we are asking, and there is a certain message in it and we are asking the child to interpret it, so in that way it is text. So visual literacy, would be the ability of the child to interpret visual text, in relation to the content that they put across to them. Where the visual texts aids them in interpreting the overall message that we are trying to put across to them. I think that would be my educational kind of expectations of visual text, or interpretations of it. I think there is also another element that is also fairly neglected in this country and that is the aesthetic aspects of visual text. A lot of the children here do not have access to different styles and that kind of thing. That is another area that I would have to add into the interpretation, because we would want to develop in children, technical skills to enable them to identify different styles and recognise them for what they are and what meaning we are trying to put across, like cartoons versus realistic type illustrations and so on. We find children can't, don't really tell the difference. They don't have an understanding of it. Incidentally they may find a cartoon funny because of a message carried in it ..

Q: But they do not know that it is meant to be funny, like we know that from a comic strip. I was actually quite interested to hear you speak about the aesthetic aspect because that seems to be quite British and American (aspect) when they speak about visual literacy, I find that they talk more about that, whereas in South Africa for us it is far more of a practical thing, enabling children to understand what is happening in a textbook. So even though I acknowledge that aspect of visual literacy but focus rather on the practical, the actual working skills that children ...

That other aspect is also very important especially with very, very young children. I think in a way it influences their psychological development and that kind of thing, the aesthetic side. So what we are doing is that we are trying to bring it in, where we can as well, even though for actual content subjects which would be history, geography, science, maths we are focusing very, very heavily on the visual text, the importance of it. The aesthetic side we've also tried to bring in, I'll show you some books that just came out this week (four story books), and you'll see that in many ways they are quite abstract and aesthetic. We think that it means something to the children in their dream world and that kind of thing ... (distortion) ... For the editors to see that kind of thing as well, as that kind of thing as long as we are not trying to put forward a complex, scientific concept using that style. If it is more to do with language and enjoyment we are looking at that kind of thing ..

Q: For a story book style, where one can do that, more than the actual textbook ?

These are story books that go into an actual language course, so we would not want to focus on only the realistic types of artwork, to the detriment of the child's psychological development, so we think it is important for the child to be creative and so on as well.

Q: So you are (not only) providing the skills, but growing and extending them as people ?

That's right ...

Q: There are terrible things I have read where they say that children are culturally deficient, or learning deficient, just because they cannot answer, or respond correctly to tests they have been given from a different cultural situation, whereas within their own culture they develop numeracy skills, counting things and all that ...

Well that is quite important, maybe the only thing I would say is that is one of the things that we try to do in our books, is to try to move the children from the familiar to the unfamiliar.

Q: Your reasons for that?

So that there is not that big gap, where you impart something out of a cultural context that they are used to and then it bows their interpretation. We try to move from the familiar to the unfamiliar. It might be the child's cultural context and environment, or it might be things that we know are familiar or interesting to the child at that level of their development. It is something, there is quite a big movement in language development related to that and it is called background knowledge. It is quite a big thing worldwide at the moment.

Q: The artists, obviously your design editors or commissioning editors employ artists ...

Well, how we work is that we have editors and we have designers and their teams, so they work together on a project. The editor will edit, look at the language and do the artwork brief. The designer will then design the book and then jointly they would select a range of artists, who would then do the actual illustrations.

Q: The artists, because they are working closely with your design and research team, they would be informed of what is actually happening ...

Yes, they will be told things like, exactly who the book will be used by and they would be given a bit more understanding about the subject area, so that they know that they should not do inaccurate stuff in the (distortion) maths book for example. So they would have all that kind of grooming. But the actual illustration is quite, the brief of the illustration, is quite detailed as it comes from us to the artist.

Q: Okay so that is at the early stages. Then you said the whole thing (manuscript) went out for trialling.

Oh the trialling material, yes.

Q: I think in the past, you may agree with me, your written text would be assigned to an artist who probably knew very, very little. Two years ago (the person interviewed from the same company) X said that is what you did then, so your company has obviously come a long way.

I think a lot of people still do that, what happens there is that the brief is so open that the artists then illustrates something that they feel would look nice, but does not aid the meaning of the text.

Q: Your artists then work very closely with X (publishing company) and there is very little room left for them to use their artistic licence ...

We try to give as little room as possible, to be quite honest, especially with those particular subjects (pointing to history textbook), for a book like that (pointing to story books) there would be much more licence. But what we do, do there is leave space within a book for illustrations to be much more open. To have a much more open brief. If you look at the history book you will see that there are some stories somewhere in the middle of it. Basically the artist was allowed to read the story and then illustrate it. So that the child could use their imagination, we try and balance it.

Q: You have mentioned that you know of research having been done, in terms of that conference (discussed earlier), do you know of any published research having been done in this field, if so do you know who the researchers were?

There is very little that has been done. Once we set up this R & D department we realised how little there was, there was very little for us to draw on. There are only two, or one project, the Threshold Project. There is not really much else, there might be bits and pieces here and there.

Q: Do you feel that the visual text is subordinate to the written text?

No, not at all that is why I referred to it as text. I won't call it illustrations, it implies that it is secondary or subordinate to the written or the verbal message in writing, in the book. We see it as very integrated and very important, crucial to aid interpretation of new concepts and things like that.

Q: You would feel that the visual aspect is very important to aid in the learning of new concepts?

It is as important as the written text, and they have to be thought of together. That is the whole basis of what we are working

on. For us that is very important. What we found in our, you see we also tested some old material, where visual text was ...

Q: When you say old material?

Old textbooks from ten years ago, even nine years ago. Where the text has been written very much by the author as the expert, handed over to the publisher and then the artists would be given a vague brief to illustrate this page, put in two or three illustrations. The whole thing would not have been thought of holistically which is what we try to do. When we took it back to the children, they did not even look at the pictures, they were n't interested, but that would have been fine if they could have understood the text, but they could not understand the text either. We feel that to use visual text, to help with interpreting the complex concepts like maths and so on, is crucial to the learning of the child. So there is no way that we would move backwards ever again, I would feel that moving backwards would be producing that kind of material.

Q: One thing I have encountered a lot of is the fact that when children come into the classroom-situation, they may have visual competence that we don't necessarily test and have high regard for in that situation. Basically I have found that the problem of visual literacy is the problem of the home. In other words they simply have not had the kind of input that other children in Western school environments have had already, so they are starting at a disadvantage.

These are things that the teacher, the publisher, the author does not take into account, and therefore does not draw on the advantages that come with it. For example the child may know very complex structural arrangements about how in the rural areas a homestead is planned out, because there is a certain pattern and in many cases we do not draw on that experience. We try to do it but we have to really stick to the content that we need to carry across so we can't delve too much into that area.

Q: And also they have got to be tested, they have got to pass, unfortunately this is our system...

So many of the children are at a double disadvantage because their own knowledge is not being used. And then they are faced with something that is completely new and they have not had the advantages that lets say more privileged children have, because they interact with books from a young age, from one or two or three. And for many children in the country they only see their first book at the age of six or seven.

Q: And then often not at home, and those textbooks that they are supposed to have are often non-existent.

That is even more reason for us to produce really excellent textbooks for the children, we try to make up for all that disadvantage that they have had.

Q: I want to come back to something you just said. You spoke earlier about the rural child and the urban child, trying to make the textbook able to encompass both of their needs and their skills. To come back to your point earlier where you said some children already bring skills to the classroom which may not be regarded as being needed in that situation - would those two come together?

What we try and do is make our books as eclectic as possible that is obviously the easier way to go about it. The main difference between rural and urban children would be the urban child's exposure to technology and that kind of thing, but we feel that child still needs to know about the countryside and how life works there and so on. So we always try and include all aspects. So the child who lives in the rural area who does not really get a chance to watch TV often, or who does n't know what a computer is, they have n't seen one. In a way we feel it is our role to show them these things.

Q: Your percentage of rural children, as a ratio, what would it be?

In the country.

Q: Let me be more specific. Let's say you have education departments buying your books, what is the urban/rural ratio.

More rural children, more children in the country live in rural or peri-urban areas. The peri-urban is quite rural. In a province like Gauteng it would probably be different, but I would say the whole of Kwa-Zulu Natal, the whole of the Eastern Cape, the Northern Transvaal, the North-Western those are the biggest provinces. Most of the children are in a rural environment, or semi-rural or peri-urban.

Q: For some reason I had this one third to two third ratio in my mind (rural vs urban).

I would rather say that it is two third, one third (rural vs urban).

Q: As a publisher there are obviously going to be certain constraints that you experience or your company experiences in publishing, which may affect the quality of educational material (published). Are there any constraints?

Well there are constraints. Two constraints that impact on each other so that it almost ends up becoming one, would be price. Which then influences things like the amount of colour in a book, because as I said earlier so many of the children in South Africa are at such a severe disadvantage. They are not exposed to colourful children's stories say the way we were when we were growing up, and so the textbook has to play a wider role than just the content that has to be in it. And we would like to do that, but there are constraints, the government does not have enough funding to buy a full colour textbook for every child in the country. So we have to try and balance that aspect out.

Q: By perhaps putting in say two colours?

Or putting some colours, not developing the whole book in colour. If you look at the history book for example I would call it a fairly expensive book.

Q: What would a book like that retail at?

About R 25,00.

Q: It gets expensive when you look at all the subjects.

But on the other hand we don't think that we want to produce a book that is like R 10,00 or R 12,00 that is inferior in terms of the illustrations and colour and that kind of thing. So we constantly trying to balance things out.

Q: Obviously time is for everybody ...

Time is another one. We have not felt time constraints that badly because we have - while many publishers have been waiting for new curriculum, waiting for direction - we have been developing anyway. That is why that history book came out so quickly. So we started earlier, so we have allowed fewer time constraints, in terms of testing and looking at visuals and certain text and how they work in relation to each other and how children interpret them so that we can get the picture, we've .. it does not matter we can do that research even without having curricula, which is what we've been doing. We have done that because we hoped that time would not be so much of a constraint as it normally is, so we've done a lot of the groundwork, long advance.

Q: In terms of curriculum there has been policy, but there is nothing concrete yet. I feel that the buck really stops with the publishers, if I am correct?

Publishers wield an enormous amount of power in this whole area and it is frightening how some people take so little responsibility for it.

Q: I want to speak about eurocentricism, everyone is using this word I know, your feelings on it in relation to what we have been talking about.

Well, I think that most textbooks in the past were much too eurocentric, not necessarily in terms of where Europe is now, but you know South Africa has a eurocentric community and an afrocentric community, and it has to do with the fact that the author's and the publishers all came from the one bank of experts, as they like to see themselves, and it is problematic. Again it relates to moving the child from the known to the unknown, the familiar to the unfamiliar. Because a lot of the material was very one-sided in its eurocentricity, it alienated a lot of children. But I think in our material we try to keep an afrocentric perspective but bringing in things from other parts of the world. In the history book we have tried to do that. If you look at this for example about colonialism and Europeans coming to the Cape, I think it is a 100%. Including our old books you will find that it is very much the foreigners arriving and the local people being like inactive recipients of whatever dastardly things were happening. Wherever we can we try to take the opposite perspective, as you will see here, local people looking at the arrival. A child looking at this will actually feel, wow but you know we were here. And look they come here and we could not understand them, but we could understand each other, we were not savages, we were not ignoramuses. So we try to do that wherever we can, and we try to show children and again using visual proof as well that a lot of information that people have said in history has to do with evidence. And so that children should not take only the written word as what it really is. There is somewhere here where we talk about early humans, and we show that evidence has been found here to show that South Africa had very, very early humans and we could have been the cradle of civilization. So wherever we can we keep bringing it in to affirm the local children.

Q: Culture, I am looking at the multi-cultural classroom situation, you've got children from a diversity and richness of cultures,

are you able to encompass that, even though children have to go through the system, to get their marks to pass?

We try to do that as much as we can. If you look at something like this (in book) we talk about the calendar which is something to do with history, but wherever we can we bring in a local element as well to show that people from Europe did not invent the calendar, then that became the world calendar. That other people were also thinking in terms of calendars, at the same time or before or in a parallel way for different reasons but that they were intelligent people with a complex social environment who had their own structures. So wherever we can juxtapose that with a more universally accepted thing.

Q: So is this Xhosa?

No, that is Sotho.

Q: These books are made for Transvaal?

No, in another place we might bring in a Zulu example. One does not want overkill so that every time you show a concept we cant include every other one, so we try and balance it out, wherever we can. That is the early human thing, that was found in Natal so we included Zulu.

End of Tape

Appendix 7

Transcribed Interview with Publisher Three

Q: In your opinion what is visual literacy?

It is a combination of text and illustration, that have been put together.

Q: And if you were to say that a child is visually literate or visually illiterate what would it mean?

I think a child responds very well to colour.

Q: And if I said a child is visually illiterate ...

I don't think it's possible.

Q: Why not?

Because the first thing they catch onto is the picture, before the word.

Q: Do you think that all pictures are intelligible to all children?

No.

Q: What are your reasons for saying that?

Well, they could be aimed too high, they could be too complicated. I think colour plays a big role here. The brighter the better if we are talking about little children.

Q: Okay, do you know of any problems that black primary school children experience with regard to visual literacy in the classroom environment?

Well at the moment I don't think there's enough of it.

Q: Enough of ...

Any pictures, it has just been text upon text upon text, and the teacher literally socking it to them without any aids that the white children have been privileged to have.

Q: And when you say aids?

Well like picture cards, flash cards, that type of thing.

Q: How were you exposed to the problems that black primary school children are having, how did you get to hear about them?

Well, we do have a few problems there. We have a few problems going in and getting their comeback. Because we find that if we just talk to the teachers, we don't get enough out of them as to what the children actually think and want. So we are not getting enough comeback.

Q: I just want to come back to this question about visual literacy again. When we say that a child has visual literacy problems in the classroom environment, that means they don't have a skill, they are not actually getting what they should out of a picture. Where would you say that these problems lie?

Availability of material.

Q: Okay, so in other words material is simply just not forthcoming?

That's right. Well that's what I think.

Q: That's okay, it is your opinion.

Whereas when I think of my children, they started from the age of six months in having picture books. I have been exposed to a lot of black families - you never see books or magazines, they rarely have TV especially up in the rural areas - that I know better - than the towns. They just don't have these sorts of things.

Q: How informed do you think your colleagues, in your company, and yourself, how informed are you of the visual literacy competency of black school children?

I think that people like X, X and X who go out selling to the schools. X is becoming more aware of the needs and is trying to give us some comeback. I think the other reps they go mainly to sell, they go to the top person in the department, or the principal, without actually responding to the children's needs. Their basis is to sell the books.

Q: Are the artists whose services you employ aware or informed of the problems your readers might have with visual literacy?

As far as we can inform them, we always give them the text. And we say, this is for Std 1 to whatever market that we are aiming at. We are as explicit as we can be, in saying that we want a picture of little children, or a hut or whatever it is, and they have our art brief or the author's art brief and the text to work from. And then we leave it up to them to give us something back.

Q: Are you aware of any actual research having been done in the visual literacy field, and if so, by whom?

The only person I know is the person I know (X) from Maritzburg. I don't know anyone who does research in the Eastern or Western Cape.

Q: Just in terms of Africa, or South Africa?

I don't know much else. But if you know of any, I would like to see it. I think it is a problem that people are now only becoming aware of. Now that the book market is opened to everybody, I think they have been very neglected, these children.

Q: Definitely.

Okay, book illustration, do you feel that it is left largely up to the artist's discretion, with a bit of editorial intervention.

Q: I think it has, because the publisher, not all publishers are that au fait with what they want from the artist, or what they expect, unless they have got a very close working relationship, and they know the work. I would admit that it is usually up to the illustrator and it is up to us to accept or reject. But then we have not got clear guidelines on what the children want, so I struggle with that.

Q: When you get a manuscript in from an author, do you request that they supply a very specific art brief?

We ask them if they can. Some of our authors are very specific, especially with English books, we are very specific. Some of them have no idea what they want at all and they just say, well, we leave that up to you, that is your job. And others come up with brief diagrams - we want something that looks like this. So it is a variety of work that comes in.

Q: In your opinion, do you think that visual material is subordinate to the text?

I think that in this age group it should be equal.

Q: When you say this age group?

Well, you are talking about the younger ones, under Std 5. I think the text must give something to the illustrations, and the illustrations have obviously got to mirror the text. So it must go hand in hand.

Q: So it is not subordinate to the text?

No.

Q: Would you say it is an equal relationship?

An equal relationship.

Q: And it is important that they are complementary ... ?

Complementary, absolutely, especially in little books like this one, where the illustrator must very carefully read the text to see what the car is doing.

Q: So there is no mismatch between the two ...?

No, there can't be, it actually has to say what is in the picture.

Q: You did mention earlier that some of the black families you came into contact with did not have any books in their homes; do you think, or know, of any of the children, for whom your books or written, whether they have other reading material in their homes, and also here we cover TV, that type of thing?

Well, the rural blacks that I mainly know don't have any of these things available to them. Some of the little schools in Alice for instance, which are multi-racial they are introducing visual material. With the more sophisticated black people that I deal with now in Cape Town, they are on a par with what little white children have, they have got their TVs and the stereos and books at their disposal, because the parents are usually in education themselves.

Q: Regarding reading materials, what impact do you feel this has on their learning at school. In other words if they did not have any what are the ...

I think it must have an impact and leave a good impression. I seriously believe that pictures speak louder than words, and it is very important for them to have posters around the schools, their own drawings, little exhibitions that they do themselves.

Q: What contact and feedback do you have with these children? Just through X (a sales representative) as you mentioned?

And through my own experiences of living in the Transkei and the Eastern Cape, generally.

Q: Are you satisfied, as a publisher, that your materials are fully trialled - the written text, and as they call it the visual text?

Well, we are getting more into that now. We realise that lot of time and money is wasted by bringing out a book and sending it straight off. So we are trialling most of our children's books now.

Q: And are you trialling both the text and the illustration together, you take the whole book out...

We take samples, like that X (name of new series). It is the first 6 weeks now, we are trialling that to get feedback and comeback.

Q: As a publisher you are going to experience certain constraints which you experience in your line of business, which all publishers do, which may affect the quality of the educational materials you publish. What do you feel these constraints are?

Well, I would like to see more colour used. But the constraints then are the printing costs.

Q: And anything else?

No, it is the cost factor.

Q: And solutions in this regard, are there any?

Solutions, would be, well, we can't increase the price of the books, so the books won't sell. We could only get a real best seller and print ten, twenty thousand, to make the cost more effective. But we can't start off with a print run of twenty thousand and then the books sells a 100. So it swings in roundabouts, so this is why it is so important to trial and get feedback.

Q: So you are putting out a guaranteed ...

And we listen to all these comments. We are asking teachers to use them in the schools and to comment back to us.

Q: Which areas do you feel are priorities for research in terms of trialling?

I am not quite sure of the question.

Q: Basically, you said you need to go out and trial more but what are you actually going to or hope to gain by that trialling?

What we want to know is the interest of the children in a specific subject, whether it is teaching them English or that they are learning to read, in readers and grammar books. We are aiming at bringing subjects in that they are interested in, not what us big people think that they should know. And we are also looking for more participation from the children, in that they start to think and do their own bit of research and then come back to us, or the teacher in this instance. Especially with this X (series), we have done quite a lot of groundwork on that and listed items we think children of a specific age are interested in. Not what the teacher wants to tell them, what they want to hear. So this is why we covered fashion and food and health matters, family matters, rural versus urban living, communication. They want to learn, they want to know about all these things out there.

Q: Is X (publishing company) currently undertaking research into these areas, trialling?

Yes, definitely.

Q: So you've got a research and development person who goes out ...

We know there's a huge market out there, as far as we are concerned, Eastern Cape is our biggest market for the books we have produced in Cape Town. And we're just crying out for information ...

Q: From?

Response from the schools.

Q: So how many people do you have working just doing research and development then?

I'm not sure how many it is but we do have a base in Umtata and we have somebody in Port Elizabeth, and we also look to the authors to give us some comeback. A lot of them are involved in education, not always teachers, but they are inspectors and, or teachers who teach teachers. So we hope we are going down to grassroots level and letting us know what they want to learn about. Because we find actually even with our black authors, they are so immersed in the way they were taught, that they are finding it themselves difficult to change. It is unblinking them the teachers, they are not broad minded enough.

Q: So its the old thing of training. What are your feelings on eurocentricism?

I think there's a place for it, we cant just be afrocentric, but there could be a place for that.

Q: And how would you see eurocentricism in terms of textbook production up until today?

Well, I know the English books up until today have leant very much on the British system, more so than on any other I think, and so obviously when they are higher up, they are reading Yates and Shakespeare and all the British poets and playwrights. I think that must fade out to a certain extent, they must n't faze them out altogether, because there is a place for them, especially if they're going on to study English. But there are black writers out there and we must use their material.

Q: And eurocentricism in illustration, what are your feelings on that?

There is a place for that too, I mean if you're bringing out Startrek, which is American, you are going to have American looking characters, so it has to fit in. I mean whether they're Russian spaceships, try and make them look like Russians. Or eskimos with igloos.

Q: What are your feelings on culture, different group cultures?

Within South Africa?

Q: Well in South Africa and also in terms of representation in books and similar.

I think it must be retained, it must be retained. The Xhosa and Zulu people I have worked with are very proud of all their cultural backgrounds and they must come forward, and to a certain extent the Afrikaans, as well I suppose.

Q: I recently read an article which stated that literature for blacks, should be written by blacks, chosen by blacks, illustrated by blacks. Do you agree with that?

In an ideal world, yes, but there is still some guidance needed.

Q: So you could not really go along with that statement.

Well, that book (book on desk) is being written by blacks, for blacks. With a white English publisher, there to coordinate. You couldn't go and dispense herbal medicine, nor could some-one who has not received the training, whatever their colour, go and co-ordinate a book. We do have black authors, and we've got black publishers in our company as well.

Q: We are now going into the whole multi-cultural phase of classroom education, and we are moving increasingly into that, whereas before you were writing books for one group, and another group, and another group, you are now going to be looking at books for the whole spectrum. And there is very often a backlog of knowledge of between different groups, for different reasons, how are you as a publisher going to accommodate this?

With difficulty because we can't bring out our books that are just coffee-coloured people, there have still got to be specific areas where the whole cultural spectrum is introduced and we are trying very hard, and if a series of books is being written for, or a book is being written for second language pupils, and there are only white authors we make sure that we have an equal number of black consultants, or indian or coloured. With the specific aim that these books are for everyone who wants to learn English. And so that is very important and we wait for their feedback. But we are definitely going the way of using consultants, and these are people in this field, I am thinking of one particular book now, which has come out, three of the books have come out in the series, and we have been criticised for being too white and too boy orientated.

Q: Gender issues ..

Now, we have told the authors, that they must make sure that girl issues come into this, and they are not just for white children, so we have actually got an Indian, an Afrikaans and three black people from different black cultures on our consultancy list.

Q: So, every time is the manuscript sent to each one of them?

Not every time, but we do want feedback, for books that we feel are really going to hit the market and fill a space and go well. We must be sure that we are doing the right thing.

Q: So you are taking it quite seriously, as an educational responsibility? Gone are the days where we got away with all kinds of things, often in ignorance.

But I mean some of our books are directed towards the bright white children. They have to be, because we must not neglect them, we can't leave them out, and they must go forward and up, but there are, its horses for courses, there are different books for different children, and readership groups.

Q: Okay, that's basically the end of it, are there any comments or observations that you would like to make, some things that you've thought of while we've been talking, that I have n't asked you or are interesting to you - maybe things that I should consider thinking about?

I think one must look at the whole package of a book, not just the text and the inside illustrations, but their first reactions to the cover and the title, is that going to grab them in the first instance. And then what is the book about, it must be quite plain, on the back page or in the preface, who is this book for and what is it about. Is it teaching you colloquial English, is it teaching you grammar, what is it teaching, what is it therefore. So, I think the front cover and the outside back cover must be very explicit, so that the teacher knows, the principal knows and then the children pick up something from that. Okay, here's a book on trains, or here's a book on geography. That must be spelt out. So it must be stated right at the beginning.

(Interview finished)

Appendix 8

Transcribed Interview with Publisher Four

I think what you will find that children who have a lot of access to visual things do not have a problem. What I have found is that a lot of kids in the township do like that very detailed artwork. It is almost like a cultural thing. (distortion) But these kinds of cartoons I have actually used in workshops and they work fantastically. Kids like that sort of humanising of the coffee bean. They sort of relate to that somehow. I think what I liked in this book is the variety of styles, this is a fairly clean drawing, this is more shaded, that is more stylised. (Discussion about the different drawings) It is hard to decide what is going to work best, that cleaner sort of more traditional western comic look or a slightly more detailed.

Q: This is actually what I would like to find out. Because I find so often publishers and their artists, a lot of them have never been into a black school and have never actually spoken to a group of school children and asked them what they like and what do they prefer, how do they feel. They sort of decide amongst themselves what they think is best for a situation.

Yes, but I don't know that you are going to get any clear cut answers either because some kids are going to like some things and others are going to like others.

Q: That I accept, but just to get a general feeling, not only in terms of style I mean there are all kinds of things. But as you say a farm book could be used in an urban school, and an urban book could be used in a rural school, without the rural child having to lose out in the process. There are all sorts of things that don't actually have anything to do with style.

I think what the reality is that maybe in the past nobody's bothered going into schools, but my sense is now that more and more people are.

Q: Now when you say more and more people, let's be specific, do you mean, publishers are going into the schools?

I think publishers and artists. I know the artists that I worked with at X (another publishing company) social studies stuff, actually worked from a large - they did not go to Namibia - but they took a whole lot of photographs of Namibian children. So that the faces in that book, the hairstyles, the dress is very specifically Namibian. What the Centre for Social Studies did was to take a whole class of children outside and photograph them all, each one of them separately, just in a park. And so those characters appear in the book. Those are obviously worked from pictures (indicating book). But there seems to be a much larger concern about the visual impact of pictures. People are being more sensitive to the cultural milieu, representing a cross section of society and things like that, in realistic backgrounds and realistic situations. So that I think is changing, I think for me the things that are not being thought through carefully enough. Is the sort of design and the overall visual impact of the page. I think the artwork makes a difference X (publishing company) does a series called XX (geography series) and they have got incredibly busy pages, big icons and then quite tiny artwork, quite a lot of the maps are small, and the kids I worked with at X (a school) hated that book. They absolutely hated it.

Q: Really, can you remember the name of it?

X (Name of book)

Q: Do you know why they hated it?

They did not like what it looked like.

Q: Okay, because it was so busy?

Because it was very busy and they could n't find anything and the pictures were very small. You see I think there are a lot of issues, and you are wanting to look at some of X (publishing company) books which I am happy to get out the catalogue and we can select some that you want. They are all the backlist, the new stuff that is coming out like the XX and things like that have very, very different artwork in them. X and myself are doing quite a lot of research into what teachers want and what kids want ..

Q: In terms of?

In terms of illustration. We obviously would involve our own interests but we would feed it in to the publishing meetings that we have. But what is interesting is that they are not wanting things like product identification like coca-cola cans because they prefer 7-UP or they prefer Lemon Twist. So kids are making decisions based on really strange things. They are not saying that we want to just see black people in the books, they are wanting to see, if someone is there they should have American clothes and fancy shoes and basketball because that is the image, that is almost what they are aspiring to, rightly or wrongly. And that is what they are wanting to have reflected in their books. So at one level they are wanting the gimmicks and the image, but then if you have a radio/tape deck they are more concerned about what kind it is, rather than what the artwork looks like, if that makes sense. These are urban children and people that we have been talking to, it is almost like we are becoming such a consumerist society, or being made into such a consumerist society, that those issues are become more important than what it looks like visually. And given that most of it is black and white, and kids have access to magazines, and TVs and comics, it is not hellishly appealing to them. Plus it is school materials ... way down.

Q: Have you come into contact with much of the Storyteller Group work?

I have seen the River of our Dreams and Roxy and things like that.

Q: What do you feel about comics?

I was not really very impressed with the River of our Dreams, until I used it and I used it in a very poor school in Queenstown, and the kids absolutely loved it.

Q: Why would you say that?

The kids, I think they had not had access to that kind of material, it was colour, it was nice, they could have it, they could take it home, so there are all sorts of other issues twined in with it.

Q: It did not have a kind of textbook feeling, issued, prescribed ..

They also liked the characters, that looks like you, that looks like me, it was that kind of thing so, they really got very excited, in fact the whole school then got into a project with it. Because the kids, and the teachers said no, no they do not know anything, they are a weak class etc, a lot of them were overage for their Std 5 group, and they really liked it. I have not used the others. I used a lot of British books as well.

Q: What is your feeling on the British books?

I found the colours distracting, most of them are full colour printing, and there is almost too much background detail. It just gets a bit much, it does not actually serve a purpose. I have gone from thinking that is really nice, to saying (distortion) I prefer a clean design. So with our maths for example we are going for a very simple clean black and white design. By design we mean sitting down and doing spreads of pages. And try to balance the double page spread, although the book does not work in double page spread, to bear in mind when the book is open that is actually what the kids see, at once. So I think those kinds of things have become more important to me than actually what the stuff looks like, and I think that the reality in this country is that people are going to copy things (photocopy). So full colour is wasted, and that's also expensive. X has just brought out a full colour history book called X. They have got a lot more new publications, so in a sense, their artwork will be better or more modern, but the problem that you might have is that they use the same four artists for most of their publications, (distortion). The one person who worked in there did a lot of sort of washes, on the stuff and it is beautiful, it is really, really nice artwork and that stuff was trialled extensively in schools. You know kids were asked what they liked, teachers were asked what they liked. There was actually a pilot book, that was used for a year, and people commented on that artwork and interestingly they wanted pictures with detail with background, because kids don't have access to that sort of media, particularly in the rural areas. So they want detail and realism, and that's what we went for then in the final book, so I think that is a very nice book it has got a lot of nice artwork in it. Their 'Looking into History' I am sure they will give you that, they have just printed a whole lot of colour, that is the first full colour history book.

(Discussion on reading skills- tape switched off)

It might be worth looking at their artwork as well, the Primary Research Project, at UCT, but MML is publishing their books, their pack, a whole range of videos, audio cassettes for teachers, plus reading books in three languages for children, and they have been also extensively trialled in schools. They started out as a really cheap photocopied materials, with a cardboard cover, black and white, with different coloured cardboard covers, and you know, what worked, what did n't work. They got a whole range of artists to do the material.

(Discussion of document drawn up by educational publishing division - tape switched off)

Asking kids what they prefer and why, and so feedback back to the artists. We also thought of actually doing a lot of photographs in schools, so that artists get an idea of the contexts that most kids are going to school in. Because a lot of textbooks have school scenes in them, that is also one of the issues in the Namibian book was that the kids said but we don't have desks like that, and nobody in Namibia has those kinds of desks. Then all the artwork had to be changed, which was quite nice that they could do that. I think you're right, artists don't get into classrooms very often and what, our other idea, which was quite ambitious, talking in the car on the way back from the meeting was to actually take the artist around. But then we thought no, we'd just get a whole range of photographs, so they can get a sense of what the schools are like, what they look like. Because kids in the rural schools in the Eastern Cape, just can't relate, there would be school buildings that you see in texts, or some of the desks.

Q: Did you work in the Eastern Cape?

Ja, I did my research in the Eastern Cape, and the other part was in Kwa-Zulu. (Discussion of where interviewee worked around South Africa - tape switched off)

You see I think this is the way the process works, because what happens is the manuscript comes in, most publishers will get it into page form, and then, so then the artist works to size because that is cheaper, than trying to reduce or enlarge artwork, cheaper and easier and probably more practical. But then the point is that you then have a heavy deadline schedule because once it is in production it takes three weeks to get it typeset and get the pages, then you have a briefing meeting with the artist, who then has to go off and frantically draw up a storm. So then they want that back, checked and in the book and published. So that is why no trialling happens of the artwork.

Q: So what should actually happen then is the artwork, ideally, the artwork and the manuscript or text comes in and the two are sort of in one accord, as it were ...

The way is I have worked with this entire book, in this series, as sections were completed they lay the proofs then, so there was a sense of where the artist could go, so the artwork was being developed alongside the text, so that was slightly different. It is not easy finding a solution because the reality is that most authors only produce the manuscript on deadline or after deadline.

Q: And then they've only got two or three weeks ...

So I would say most artwork is not trialled. I could safely stick my neck out on that one.

Q: Which I think is to the detriment of the final success of the published work.

It could be that the publishers don't care, it is not their job in a way, their job is to produce books.

Q: I still think they have got a responsibility.

Yes, and I think they would all agree, that they have a responsibility, but the reality is it is Monday, the book is two weeks overdue, and the artist has not arrived and things like that and its going to get slotted in and produced.

Q: As a publisher, you are working for a publishing company, there are obviously going to be some constraints in your line of business, which may affect the quality, as we were saying about visuals not being trialled. Which areas do get affected?

In terms of the book production?

Q: Final things, that are going to go into the final book and the children are actually going to use.

I think probably the most obvious fault would be in terms of accuracy, because what will happen is you get, once it goes into production you get your manuscript back and you get page proofs, but authors have got to check that, fast. Which they often don't do very well because they know the manuscript so then they have already worked on it and they don't pick up mistakes or inaccuracies, and things like that, and if you don't have a good editor, then those things will slide. I don't know if the artwork suffers from those kind of rushes, but I don't think it gets trialled, that time is not built into the process, because it takes about six months to get a book completely through production.

Q: So that's from when the author brings in his manuscript. What do you feel the solutions could be, obviously then the focus is on the artwork ?

Even if we can't commission the artwork before we have pages, is to get some stuff done and actually ask people what they

think about it.

Q: People, being?

People being kids and teachers.

Q: So you would be prepared to go into your schools and ask them what they feel,

I would also be prepared to link up with other organisations and get them to do that for me, if I can't do it. And I think what is happening now is people who have worked in NGOs are moving into publishing. It is an interesting sort of dialectic where before people in publishing have traditionally been publishers, but now people are moving in who have worked in schools, who have worked in projects, who have done various different things, and those people are good contacts for those people who are still left in the NGO field, and the people in the NGO field are good contacts, for me, for example. So I am prepared to do things for them, and they are prepared to do things for me. So I think there is a much better relationship in terms of reciprocity and openness and wanting to build together, for something better. And also maybe as more of us move into publishing, certainly in geography that's what's happened. A lot of people who I would term to be progressive geography people, have moved into publishing, but they are all working for different publishers. In theory we are all in competition, in reality we are all friends. There is a bigger exchange of information. And really that will begin to address some of the problems. What I think needs to happen, is the development of more artists. So that you don't have the same white middle class people doing all the artwork.

Q: When you say the development of more artists, are you suggesting that you would like to train up black artists?

I don't know if it is a case of training up, I think it is a case of finding people, approaching them, and I suppose enabling them to access the system, because in reality those people don't know who to approach, they have talent, they have skills, but don't know what the process is for working on books. (Discussion about various people) I think that publishers need to not only take responsibility for developing new authors, training people, empowering them, skilling them, but also with artists. Because there are twenty people (artists) in Cape Town to choose from and all publishers use them.

(Discussion about artists - tape switched off)

Q: I have actually been shocked by the standard of some of the artwork, I am shocked that they let the standard of work go through that they do ...

I think that is when the rush happens as well, so when people are, essentially overworked, and they are needing to get the stuff done so that they can get paid. People who are selecting it, or using it are not necessarily artists. I think until this year X (publishing company) did not have a designer in-house, until this year. But before it just used to go to the typesetter, and they would just slot it in, drop it in. Not only was there not any layout creativity there was n't a critical eye at the artwork, and some of it is really awful, it is disgusting. If you look at some of the covers of the African literature stories, I could die.

Q: Okay, so we've covered some solutions. Which areas do you feel, would be or are priorities for research? Which areas are lacking in this company, what are the weak areas.

I don't really know the company well enough to work out where the weak areas are. I think one of the weak areas for us is the lack of market research.

Q: Okay, be more specific.*

We have a marketing department, which consists mainly of reps, who don't seem to do anything else but drop off a couple of books on principals tables, whereas for me as a publishers, what are people's reactions to books, what do people think. So input from the consumer would be useful, and that is a really weak area.

Q: And would you say that kind of approach, filters down into the micro situation, of the child in the classroom?

I think it could. In the past there has not been much workshopping. What is happening now, is that more and more publishers are and certainly we are also trialling materials and working with teachers, workshopping stuff, getting comments working it through and re-working in terms of that. But it is still, that is only happening with new projects, now that does not happen with old projects.

Q: And your new projects are mainly in education, have all the other projects adopted this trialling and research approach.

Yes, I think the interesting thing is that X (publishing company) has put that money for research and development up front. So they are prepared to pay my salary to look at what is happening in maths. They have started an english second language teaching division which is, they are going to have to sell like 5 million copies of the books to make money, because so much money has gone into the research and development. So that is the environmental studies, has been massively researched through Stellenbosch university. The afrikaans second language, the XX, has been trialled and researched and worked through. I think that is a policy decision to put that money up front and to pay for research. Because otherwise we are going to be left behind. So it is a survival decision, as well as a strategic one. Which is what they brought in and got staff who have worked in other fields it is used to be very much a white male dominated, Afrikaans set up.

Q: Do you feel that visual material is subordinate to the text, secondary to the text?

No.

Q: Or do you feel that it is an integral ...

No, I think it is absolutely essential, I have worked mainly in primary school. My teaching has been in secondary school level, and my work has been in primary school. I think that children are reading less and less and they are less and less able to read text, which I find sad, but I think that is the reality.

Q: Why do you think it is so?

I think as the multi-media hits them books become less and less exciting.

Q: And yet, the current figures and statistics I have come into contact with show that there is actually very little in terms of a general percentage, that the children have access to. I am not talking about a child who might be attending a Model C school is obviously from a different group. They say that there is so little actual material - that some of the textbooks - if they are lucky enough to have a textbook, is all that they ever see and television ...

And they all do, in terms of access to TV, I think maybe only people in deep, deep rural areas don't have access, or they make a point of getting access when there is something that they want to see. I just find that maybe it is the language of textbooks, kids find them difficult to read.

Q: Do you think that would be the appeal of the comic book approach? The street, or everyday language ...

For me, I don't think that is the answer, for me the answer is to give them the proper tools to deal with the text. A lot of textbook language is passive voice, it is very difficult, it is dehumanized, writing about things, rather than about people. There are very few people in school textbooks, I think that is the issue. I am talking more in terms of "wine is produced in the Western Cape, bla, bla, bla, it is all passive voice. There is not conception of "people farm in the Western Cape, they grow grapes, they make wine and this is how they do it". So I think there needs to be a greater use of headings and sub-headings, not millions of them. Which give kids clues to what is going to follow on. And also illustration, and I think the use of, not just visual illustrations, graphics, graphs, maps, tables things like that. I think that the other problem is that, in trying to simplify things, simplify them so much that the content actually cant be understood. And it is just not written in a natural way, and maybe that's the problem. Certainly in terms of maths books that's the problem. Kids actually physically cannot read them, they end up in tears. So for me the illustrations are crucial, but they have to serve a purpose. There are some maths books that have got these pathetic, vile little characters, that really don't serve any purpose, they are disgusting, I taught from this book and I absolutely hated them. Look at these two, they've got names, one is stupid and one is clever. They are vile, and they're all over the place. Now for me, that is a useless illustration, have nothing rather. (More discussion about illustrations) Those don't serve any purpose as far as I am concerned, it needs to be part of the writing process, which means that the author has to be trained to think quite carefully about the artwork.

Q: What do you think visual literacy is?

I think it is the ability to understand what is in the visual, but I think it varies. And I think different people have different visual literacy skills, and different levels.

Q: When you say people, could we break that down, would you say which people and why they have different skills, or how?

I think, and I don't have a specific group of people in mind. I am just thinking even in terms of my own dealings with adults. Some people can look at a graph and understand it very quickly, other people cant or don't. So some people are more literate in that they prefer to read instructions, some people would like to look at the map, and draw them.

Q: So it becomes an individual thing?

No, I think it becomes a whatever-you-are-comfortable-with thing, as well. And often there is a thing of trying to get pupils to take notes with round diagrams or flow charts. For some kids that does not work they prefer to write it chronologically. They feel happier or safer with that, but other kids can do diagrams and things like that. So it is a difficult question, I think for me basically, visual literacy is the ability to interpret and understand the visuals at whatever level, and I think those levels vary, and I did some work with adult literacy people, particularly looking at maps, it was a big issue because some people could understand the scale whereas other people could n't, they did n't understand that South Africa to America was really mega far, they just perceived it literally. Other people accepted the globe, some of them said what is inside, they were n't just accepting it at face value. So I think it varies according to people's culture exposure to literacy, I think there is a perception that very often cultured children who have not had a lot of exposure to the same sort of stuff don't have the same sort of visual perceptual skills as other children, who have had exposure to a lot of visual material.

Q: Do you agree with that?

I have not actually got enough data to agree or disagree. It just seems to be that quite a few people say those kinds of things.

Q: People say a lot, but the actual primary research is very little, this is what I am finding a bit daunting at the moment.

Do you know of any problems that black primary children experience with regard to visual material?

Q: Not any that I will be specifically able to talk about. What I do know is that when, when a science project did some research, asking what people liked in terms of pictures, was that they picked certain things. And a week later they came back and they said, we've actually thought about that and in fact we like that one better, for these reasons. So I think the difficulty is that initially, you are going to go with whatever has the initial eye appeal, but once you have to work with it you may want more detail, or you may want more realism or whatever, so ...

Q: I think that is a very good point ...

I think that is the problem people go on with all kinds of things and some of it works and some of it does not work. I do not know specifically what problems kids have.

Q: Do you think your company would ever think of offering workshops or something similar to make artists, and not only artists, but authors, as you were saying to make them think in terms of the artwork, not necessarily workshops but some situation where the whole thing could come together.

Sort of like a materials development workshops.

Q: So often the artists has been left out of it, they have been the cinderella in a sense, because you know the power is behind the editor and the author, he or she are the main people.

I am sure they would be happy to do it, but I don't think they have thought about it.

Q: What are you writing down?

I am writing it down, I think it is quite a nice idea. I think that would be quite useful, certainly what we would do is made sure that the artists met the authors and get a sense of the materials, because very often they don't. The authors don't have much to do with the artwork briefing. A lot of the artwork briefings are done in-house by the publishers. Now we have a different system, is that the author actually keeps track, we use a system of filling in forms, which is very bureaucratic but it works quite well. All the artwork is numbered, as the author is writing, the kind of artwork they want is filled in, so that the author has to be aware of what the page is looking like and then they fill in that they want found, and things they want drawn, they actually write whatever number it is, describe it and attach photocopy, resources or whatever, for the artists. So certainly all the projects I have worked on the author's have quite a large input in terms of what the artwork needs to look like. And very often the authors in terms of educational publishing are ... (distortion), so they will have a sense of what will work and what won't work.

Q: Are you aware of any research having been done in the field of visual literacy, in the past, and if so by whom?

That I have given you (British Council publications), but most of it has been fairly informal. X who worked with me at XX, did quite a lot of work on looking critically at photographs. So it has all been fairly informal. I think people have formalised and they have tried things, but that it has not been documented and it has not been written up.

Q: Do you feel that illustration has been left mainly up to the artist's discretion with a bit of editorial intervention?

I think largely that is what happened, I worked differently with the artists on the geography book so there was quite a lot of intervention, the artwork was actually happening alongside and I was saying, no not like this, so it was not an editorial intervention it was an author intervention. And in fact the only I think publisher intervention, was in cleaning up the artwork, because they did not want the scritchings either. My other book, I have seen some roughs of the artwork that I said "lose", "get rid of", "redo". I worked on the XX (name of project) for X (name of publisher) and part of my job was to look at that artwork. So, those were artwork roughs, so the artist had to change quite a lot of things. I think if there is time it happens, if there is n't time it doesn't happen.

Q: Time is the big thing, and time equals money?

In the final analysis, but if the publisher perceives that as important they need to make that time, so that publication happens in more time. We have got to look at examples of excellence, not only locally, but in Africa. But at the same time I think you also have to avoid the other way of stereotyping, where you present everything that is from Europe or America as bad, but I think you need to look at that realistically, and in terms of geography, quite a lot of material that would usually come from other countries and if you can find those examples, bad examples from the States, bad examples from the UK as well as good, then you go a long way to addressing that. Like one of the things in the Std 5 book, one of the countries they study is Britain, and traditionally that is very dry stuff, and what we did was to look at two aspects that appeared in the British press, to look at social problems that they might have in other countries. So I think you can go overboard and get very anti anything european which is unrealistic. For me the malecentricism is far more scary. So I would say that racial stereotypes and gender stereotypes are quite important to challenge. So I think eurocentricism is very easy to get around, I think you can Africanise things, or localise things very, very easily. It becomes more difficult to challenge those gender and racial things, just in terms of access to material. For me those are more crucial issues. In terms of the mathematics, is to push the thing that quite a lot of the mathematics actually came from Africa. A lot of number work, the first money, geometry in terms of buildings and things like that was developed and used in Africa thousands of years ago. So we are wanting to strengthen that base.

Q: It is very interesting, I have never heard of it.

It is very difficult as well.

Q: Why?

Because there just is n't actually any recording or material. I mean obviously you can use the pyramids, you can use Great Zimbabwe, you can use Mali, civilizations in Mali who had money and things like that. And Islamic flower patterns from the North. But it is quite difficult and we are having to look at things like in North Africa, the dyeing works, where they dye fabric, where they have a ratio of dye to water, so people just used mathematics and used it effectively for quite a long time. But mathematics is particularly eurocentric, sort of Greek and Roman centred, and we are wanting to challenge that.

Q: Oh really, well I wish you well. In the same breath, what are your feelings on culture.

I have actually written quite a lot of stuff on culture. I think people cling to it, and I am really sticking my neck out here because I upset a lot of people. People who cling to culture make excuses for things based on its against our culture, or its not our culture etc, etc. But for me one of the most powerful cultures, is popular culture and youth culture.

Q: Could you be specific about popular culture?

I think that, certainly with teenagers, whatever is happening around them in terms of films, music, things like that it is far more important to them than a lot of the traditional cultures that have been with them. For me culture is a bit like an onion, every successive generation builds their own layer and adds to that culture and eventually they may go back and take things from previous layers and they become more important to them, but I think that culture is not a static thing. And I had huge arguments with the person I worked with who kept saying but it is not in the Zulu culture to do that, and I was saying I cant buy into that, I cant accept that to disagree or to argue is not part of a culture, it might not be part of your reality, but you cant speak for a huge group of people and say they do this because of their culture. I don't know I think there are too many variations and too many differences. And certainly I think for children, there own cultural groupings that they form are far more powerful than anything else.

Q: You don't think that culture, a mother and fathers cultural tradition has a lot of influence on them?

No, I think it does influence them but they form their own interpretations of what is important in that, or they take what they like from it.

Q: Would you think that a child in say lower primary is actually capable of doing that?

I think they still are, I have seen five year olds, whose parents don't read, they don't come from a reading culture, get very into books. Because at school they are promoted. So that outside influence becomes more powerful in a sense than what happens at home. And maybe it will eventually fade out and they will sloth out and become like their parents who don't read anything except the occasional magazine or something like that, and I think even at that level their are clashes, because the parent does not know then how to deal with this growing child. And then I think quite a lot of examples of that kind of thing or the parents are very into health and exercise and the children are n't, because the predominant group at school is into junk food. So I think even very young children, develop their own norms. Obviously their parents are powerful, but you can see even five year olds deciding what they want to wear, because it is important that they look the same, they get into all sorts of funny things, because that is what other children do.

Q: Would you agree that a child is heavily influenced, the formative years from 0-5 years, what the child brings into the classroom at seven years is very much culture dependent ...

Ja, at one level but I would say that it has also been very much environment dependent.

Q: Culture and environment, sorry I should have qualified that.

It is quite difficult in terms of my understanding in my league of culture, because I think there are a lot of other issues.

Q: Yes, also socio-economic ...

But I think it is important to consider what the background of the child is in terms of educational provision. If they've never seen a pair of scissors, or they have never seen a pencil, then you have to do that kind of work. Or who don't have access to books don't know, but I mean even kids who do have to be taught that text reads from there to there, initially most of them will read that way (from the back). So I think it is, I don't think you could ignore, I would see that the culture and the background plays an enormous role in terms of what we all are. All I am saying is that in my head is as a result of a whole lot of different things.

Q: We are now entering into the whole multi-cultural, multi-lingual phase in classroom education and obviously there is going to be a large backlog of knowledge, skills, as a result of their different environments ...

I think it is more complex than that because what has happened in some of the working class white areas, where other children have moved in, coloured children for example, is that standards have actually gone up in fact it is the white children who are falling behind, because they come from working class homes, and the coloured children are often middle-class children. I think it is a problem made worse by a whole lot of age differences and things like that. For example there was some research in the UK that said that in a normal maths classroom where everybody is the same age, the differential in their abilities can be as much as seven years. Now that is with children of the same age, so how much more problematic does that become when you have kids who are eight and kids who are fourteen in the same classroom. And I think those things are far more worrying. If the teacher is working effectively she is always having to deal with different abilities and different skills, even with the same cultural group. So teachers are able to deal with some of that. What has to happen I think is that assessment needs to be re-looked at in terms of giving children freedom to move forward, to sort of be accelerated, if they are better or capable. So if you are fourteen in Std 2 and you master that stuff quite quickly, why spend the rest of the year learning that boring old history and geography that you can pick up at any stage. Rather move into Std 3, cope with the mathematics and concepts at that level, if you master those, even if you skip a whole year, in one year, so what, because the bottom line of content is actually not important.

Q: When you say content?

The sort of factual information, I think that coping skills, skills of working, research skills, things like that. They are far more important. If they can do that, they can find out what they want to know. And also, so much of the content is repeated and built on. That is kind of part of my own experience, I came from the UK to school in Std 3, where I had done no South African history and geography and I think initially you are at a bit of a disadvantage, but those kind of things you pick up.

Q: I just want to come back to that question again, I would like to get some more information from you, what you have here is say a group of children, lets leave off the age thing for now, and lets say we have Sub As and they are all seven to eight, in the multi-cultural classroom situation, and there may be an incredible backlog in skills and knowledge. I find that skills ability has to be taught. You have got all these children in the same classroom, using the same textbook, and this is becoming more and more of a reality, where before you had all kids from one suburb, or all kids from one township going to the same school, now we have a cross, which is wonderful, but at the same time it does present problems for the teacher, so I feel it is

something that publishers certainly need to take into consideration in the production of textbooks.

There is still a lot of research and debate on multi-culturalism, and it was very big in the UK about 10 years ago. But there is still a lot of criticism of that, and it is interesting that we still see in negative terms, a backlog of things rather than that all children do have some skills, they just have different skills. They need to be developed. I think that danger is of almost becoming pathological about perceived deficiencies in children from different backgrounds. Whereas a child coming from rural Transkei coming to live here may have tremendous oral, story telling skills, or dancing skills, which are all important, they may not be able to hold a pencil, and I think the challenge teachers is to tap into that richness of skills and you get kids to teach each other. Yes, the skills need to be taught but they are also fairly basic at that level, and mastering is not that difficult. So you might find a child who has never had a pen or a pencil or a book, but they have counted goats, so they are immensely numerate, they've had to check that the 50 or 40 goats have come home every night. So they have a counting system which may not be 1,2,3 to 40, it may be names, or putting sticks in a jar or whatever but their numeracy is already ... so they have a range of skills that are unexposed in the school situation. Certainly because they do not know how to use a pencil, they are perceived very often to be stupid, to be deficit, rather than to say hell, this child knows 50 poems and can count up to a 100 whereas somebody else can really draw beautiful things, but can't go further than 5, and only because they have memorised it and their mother has repeated it since they were like two months old, but they do not have a number concept. To actually show you the quantity 9 it is not possible in a lot of cases, so I think probably a lot more research is going to have to happen in those areas.

Q: You are looking at a very much more holistic, more rounded overall education, rather than the three R's approach.

The problem is that I think that the teachers have been trained in fairly similar cultural institutions, they have grown up fairly isolated from other cultural groups, even English; Afrikaans is a problem. There needs to be massive retraining of teachers. Here I also don't believe, I think textbooks are powerful and they are useful, but I think a good teacher can use a bad textbook very inventively. Often all we have had in the past has been bad textbooks and we have had to use them quite effectively, and if you are teaching kids to be critical it is great to have a bad textbook, you need to be critical of it. So I think there is massive retraining that needs to happen of teachers, so the multi-cultural thing will become less and less of an issue. I think that what tends to happen is that the predominant culture will win, and schools are grappling with that, they are having to live with that and it is difficult. Girls schools like Rustenberg are having to deal with quite a large sudden influx of Xhosa speaking children, and they are loud, they speak loudly, it is a cultural thing they speak loudly to each other, where they shout at each other, and that school where everybody has crept around in straight little lines, with their little hats on, some of them have got these loud girls in their school and they don't know what to do with them.

Q: Can I just come back in on that question. I need to come to some kind of understanding. Let's come back to the textbook, now we've got these kids from different cultural groups which you, I really appreciate what you have just said, and they are all using the same textbook and they all have to pass at the end of that year and they are all going to go through the system, which is not kind in terms of accepting an individual because they have had a rich oral tradition or whatever, to use your example, that won't come into an examination paper, although I do accept that somehow the teacher could draw that out of a child and encourage the child to use that within that system. At the end of the day, marks are what determine the child's success, unfortunately, in our system. The textbook and the teacher, the textbook being the container of information and the teacher being the purveyor of that information. You are writing materials for quite a cross-section of children now, whereas before it was white schools, black schools, now we have much more of a multi-cultural approach, I am asking you as a materials writer how you are going to encompass this situation, that is a reality and is becoming more of a reality.

Okay, junior primary, the material that we are developing has been trialled out in quite a lot of schools, because it was worked through with an NGO and in fact we are not developing textbooks for junior primary, we are doing a series of games and cards and things like that, so the textbooks only start in Std 1. And I guess you've just got to, if they are going to use the textbook, they have to be able to read, and hopefully those are the sort of skills that can be taught. So, they've got to learn to read and in order for them to relate to it, it's got to be appropriate to whatever their realities are, and that is more difficult in terms of problem solving. But I mean I don't actually have a hard and fast answer. And the way that we are working is to try and involve authors from different backgrounds and try and transcend some of the skill differences - I think is the major level. There might be relational differences, in terms of how kids relate to what is on the page. You see with maths it is slightly different, in a sense that people are moving towards a constructivist approach of monitoring and producing in your head. I'm sure you've seen your daughter doing a whole page to do three additions or what have you. Personally, I think it needs work and I think it is being interpreted incorrectly in a lot of schools and we are also trying to say that we are not going to go with a particular approach, that we are trying to give kids tools to do things in a way that works for them. And if the way works for them, for me I am very much more of a technical mathematician, and I like to do things in a responsible way, so a lot of my approach in geometry would be to get kids to solve a problem anyway they want and then you look at how you could make it shorter. (Further discussion on mathematics.) I think what we have to do is to make sure that our context are relevant to as many kids as possible, but at the same time expose them to many other contexts, but also make sure that our approaches are different and at the same time that our language and (?) is accessible, simple. That's about all.

Are there any other comments or observations you would like to make. I feel often when you are speaking about something, you have ideas but you don't necessarily get asked a question.

I think it would be very interesting in terms of once you formulate some of your findings and you've tested some material, maybe you could give a workshop to the staff here, and talk to the publishers. I think it would be a very useful thing for us to hear and it would be useful to sort of have questions asked of your findings, and have to justify it ... put you on the line.

(Interview finished)

Appendix 9
Transcription of Recorded Interview with Illustrator One

Q: Do you enjoy the work you do?

Ja, I do, I get very inspired by the whole area of work but I find I get incredibly, sort of undermined in that inspiration - by things that have not been thought through properly, because I think as you're drawing a face of a little child or whatever - it is like, that in order to make it's face look happy, you have to get happy yourself, you know what I mean. And then you have to imagine and empathise with that child, and when you're doing something that you know is going to be quite irrelevant to that child because it's been badly thought through. You know it's quite direct, because you're looking at it's face.

Q: This kind of work, does it enable you to work from home, but still earn a reasonable income?

Ja, it does. I don't choose to work from home myself because I like to have quite a lot of structure around me so that my head's clear and that I'm feeling business like, that's why I work in an office.

Q: How did you end up becoming an illustrator and why?

I could always draw, because my parents always used to buy us paper when we were little to entertain us, so that was like a maintenance free way of making us shut up. Then I studied architecture, I was working in an architect's office and a friend of mine who worked at the X Group in Johannesburg, came down here and they said that they maybe wanted to start a Cape Town X group, and he just called together a whole lot of people who he knew were interested in drawing. Through that I got involved in the Cape Town X group and then I worked with X X and I started getting work through him because everyone was just like banging his door down, and when in the end he could n't do all the work himself he started passing it onto me.

Q: How long have you been illustrating for?

I have n't been illustrating full time for very long but over time I'd say for about four years or so.

Q: And for a variety of companies and groups?

Ja, I'd say I've worked for all the big ones, a little, not enough recently to have an idea about them, necessarily, in terms of their policy and things like that.

Q: And how do you see your role or your function as an illustrator?

It varies with the project, I find that at the moment in some areas people are quite up for suggestion, and other areas they are not and I think in relation to some people - because I have actually made media myself I know quite a lot about what their thoughts are and what they're trying to get together. And so for the people who are more open for suggestion I have got a lot to say to them, about like the book as an entirety, designing it as one visual object, where there's continuity like all the way through and the whole thing works, but there are not that many people who are open to that kind of suggestion. Some of them are starting to want to talk to me, some jobs I just get, like you know a bunch of things, like draw this, draw that, draw the next thing and then other one's they are more open, but, ja, it is still frustrating even with the one's that are open, dealing with like, ja I mean I suppose in a way a sense of apathy or something, a kind of lack of commitment or thoroughness and thought. I suppose because I am new and new brooms kind of sweep clean, but people just want to meet their deadlines and hash things through and it's frustrating.

Q: Have you had any formal art training, you said that you did architecture?

Ja, I studied art at school, I had a really good teacher actually, but other than architecture the thing that really taught me to illustrate, is working with X, because he studied it like really, I mean more than anyone in this country, gets an opportunity to study it because of where he studied and he knows like the tricks of the trade as an illustrator and he could tell me a lot of those things, so I think that ... ja it was like an apprenticeship, I mean I truly believe he is, besides like Derek Bouwer, he is in the same league as them and you could not find better.

Q: So is that more satirical cartoon type art, I'm not familiar with what he does ?

Ja, you see satirical cartoons may be satirical but there are issues that underlie them - inform all kinds of illustration, especially

visual literacy, because if you look at the origin of the cartoon, like in the olden days when all those kind of like, like when people used to do really realistic paintings, if they did a cartoon it was like a sketch for that painting. And so within that whole thing you would get framed, in that picture, the exact image that they wanted and the correct way of light, that whole thing. So it really ... a lot of the discipline is about that, about making the picture that you have, like exactly represent all the elements, so that if you look at it, if it's a classroom or whatever, would contain enough elements so that you could be in no doubt that it's a classroom.

Q: What do you know about your target audience, black primary school children?

Well the only experience I have of them was while I was making photo-comics, during that time, the kind of pre-tests and post-tests and that kind of stuff that we did then. We went out and held workshops with people in the schools and so because of that I've got some idea, like who they are as people and all that kind of thing. But I think that area is incredibly neglected in this publishing thing, it is one of the things that I actually feel very, very strongly about that. Artists are expected in a certain way, like targeting the target group accurately, is one of the most important things that is going on in the process as it exists at the moment. And that, that incredibly crucial step is left to artists to suck out of their thumb, and those people just don't know and the publishing houses - because they don't want to face the expense - like to just sort of shove it under the carpet, and just make people get it together and as though the publishing houses themselves have no idea who those children are, they are floundering, and they are asking me, or whoever else, like what a person's cooking pot looks like in Khayelitsha, like all this kind of stuff. And because they've got no idea themselves as well, I think that a lot of power is left in the hands of the authors, who seem to be incredibly ignorant in the main about this kind of thing. I mean like the feedback you get from them about drawing is so ill informed, it is ridiculous, where a hell a lot of these people are just kind of very, very angry conservative, like alienated people in terms of the majority of us.

Q: Are there any areas of to do with your illustration, specifically for black primary school children, that you feel you may or would like to know more about?

Definitely, what I would like to do for my own information. I want to go out like when I've got enough money to set up the thing, interview children at every stage through school, like a whole file of all the things that they are interested in and the questions that they ask about things and stuff so that I can be sure that I really know, like, each age group of children, and then the other thing I really want to do as well, is to go out like - I know these things are very difficult to organise because you need contacts and stuff - but to go into the Transkei or whatever and do the same thing there with children there and understand them in the context of their communities so that I can get that stuff right. And it really pisses me off that a project so necessary and of that enormity, I actually have to fund myself, if I want to be a decent illustrator.

Q: Are you satisfied with your illustrations, not so much artistically, but in terms of what you have just said?

I am very frustrated by them.

Q: What frustrates you?

I feel that at the end of a day's worth of drawing, I can't feel good about what I have done, because I know that it's not working ...

Q: Why?

Because I know the concept of the book is n't working

Q: So perhaps the text is n't working, as well as the illustrations?

Well I think, there are two levels, well three levels it works on, the one is when the text is badly aimed at children of a particular age and whatever, like a level of wisdom that the children may have reached and they give them stuff that is like completely childish, that a 12 year old for instance would be embarrassed by. Then the other level is like the design of the book altogether, that if the book makes no visual sense, where illustrations are occurring arbitrarily and they are ugly and they can't fulfil any meaningful role in relationship to the text. And the third thing is that people who commission illustrations, don't know about what can go on in a drawing. I mean some people can if they've got common sense, which is basically all it takes in a way but a lot of people ask for drawings where as an illustrator you know that the art of drawing itself precludes that thing being possible and ever working. Like they will ask for things where far too much is expected of one drawing. For instance I had one thing where I had to draw an entire city, with like squatter camps outside the city, and within that they had the hospital and shopping centre, and a guy fixing a pole and cars on the motorway and you are supposed to ask these really in-depth

questions like, where do the rich people live?, and where do the poor people live?, and what's that guy coming out of the hospital?, oh, he's a doctor - and meanwhile the whole thing is 10 to 15 cm wide and 8 cm high.

Q: Okay. In your opinion what would you regard visual literacy as, what would be your definition of it?

Well, when we were working on our photo-comics, we had a study that was done by the World Health Organisation, about visual literacy in developing countries, and they gave us like this little book and they had done a test, I think it was with a pot, a normal African cooking pot, it would have been like a pot that was quite familiar to the people, who were looking at the illustration. And they had done it in the various forms, like a very simple line drawing, and then something with a bit of shading, or something like African patterns on it, the thing that they recognized most is the photograph, so I think that is where really, what we are talking about. Things where the sense of representation is like as close as possible to nature, is what you are looking at. And sort of like not cutting people off at funny places on their body, or not having a dismembered hand holding something, and having all the elements in a picture, so that you can recognise what something is. So if you're looking through a doorway, so that you should get the edges of the doorway, so that people know that you're looking through a doorway at the scene. Don't just have bands of colour on each side, so that no-one knows what it is. Those kinds of things. And it is very, very difficult to accommodate that when you are drawing pictures that have been commissioned by people who are not thinking about visual literacy because they ask for those things. The things that you know you should n't be doing.

Q: Do you have to do them?

Well, you have to do them. There is no other way of fitting the stuff in.

Q: Do you know of any problems that black primary school children experience with educational materials in terms of the whole visual literacy thing?

Well I know that there is absolutely no way, that I would get any feedback about that from educational publishers and I have had some feedback around it through the comic work that we've done that we've gone out and actually pre-tested our pictures and stuff like that. I think in that way we probably would not just come up against same problems that people are having in the educational area because stuff that we did was being so careful about all the visual literacy elements for starters. So they did not really come up so much as problems. I do have an idea that, for instance, if you get something like a cartoon with six frames, and they are like two frames in three tiers, and you are pitching that at children who are like 10 years old, there is a possibility that they will not know that they will have to read those things from left to right, top to bottom.

Q: So how would you overcome that?

Well in the comic we did, what we then decided was to make the comic be a long format, this way, like landscape format, so that all the frames went from left to right, so that there was n't anything of frames being on top of each other. So we solved it in that way, but I don't see any attempt of solving that in textbooks, or even of addressing it. And the other thing that I find very difficult as well are, when you have a lot of speech balloons in a frame, they need to go very clearly in an order for people to understand who is saying what when, and people just throw these things all over the show, and they'll have two characters talking with a speech balloon sitting like bang in their eye line. You know, or they put in so many it is impossible to actually have a drawing in between all that stuff. So you are looking at things that are very, very compromised from the outset in terms of anyone being able to make sense of them and I think that when you have a confusing set of images, it just throws your eye right out. Anybody looking at that page just does n't even want to know what's on that page, because it is off-putting on a visual level.

Q: How did you encounter or find out about problems that the children have in this field?

I have never heard of any through illustrating for publishers, the times when I have heard about it before was when I was doing architecture. People sort of had things there, if you had a little signboard and there's a loaf of bread on it, like someone who lives in a squatter camp might think that was a house. So all those kinds of things got thrown up as problems. In terms of the publishing children, is "Oh my God, all our illustrators are white and they don't know what black people's houses look like" and "Are you sure that, that's the kind of pot a black person would use" and all this kind of thing. The people who are commissioning the illustrations, don't even know themselves, I mean, my God, how are they ever going to judge if you're right or wrong and that's the level which I get, it is a very like nit-picky quite sort of surface oriented, getting the details right meanwhile the stuff that people are saying is ...

Q: Straining at gnats and letting through camels ...

Ja, they had this one thing where this little girl, in order to make money, she goes out and makes a little basket out of that wire stuff, you know that people sell at the traffic lights. Now you know I once tried making one of those things, I promise you they are bloody difficult, that wire is incredibly hard, no ten year old child could make that in a life time and I think, you know, it will emerge as nonsense, clearly, to the target group. Who probably know the people that make those things, and it will become very, very obvious as like transparently racial nonsense as well, I mean they know like obviously, I mean you can see that kind of thing.

Q: So you then, obviously, don't have any sources you can consult ... Okay, do the publishers who commission you explain much about the situation that black primary school children find themselves in?

What they express is what they themselves don't know.

Q: Would you say that goes for most of them that you worked for?

I mean most of them have absolutely nothing to say about it, the ones that are concerned will say that they don't know and that they're trying and the level at which they are trying, is oh well we must have more women than men and more black kids than white kids and that's sort of like where it goes, and they'll try and like - I remember we had this one thing where we had all the earth's pre-history with five continuity characters and they'd written up all these histories of where these kids came from, very P.C. Like the leader of the group comes from a very poor family, and she lives with her grandmother, and she's black, and she can barely speak English, meanwhile she's speaking English throughout the book in speech balloons, but anyway, this whole thing of what you can't see in a book, because it's a pre-history, things that would have to affect the picture as it was there.

Q: So they don't give you anything to go on, they don't give you a handbook, workshop or anything?

No, nothing.

Q: Have you ever been into a black primary school classroom or into their area, apart from passing through a squatter camp en route ...

Well, ja, because of the comics that is the only reason why.

Q: Did you go there specifically to test the comic?

Ja, that's why we went there, ja.

Q: Roxy, was aimed at which age group?

Ja, it was aimed at senior school pupils, and the community, we did not have much choice, because it was a school that the medical research council had made contact with in the Bo-Kaap so we could not make it to a black school, it was already a Muslim school. We had to create the boy from the township, the love interest, to tie the whole thing together.

Q: You've never been in a position to ask a black child, in a candid way, whether they like your work, or whether they understand ...

Oh no, never.

Q: On whose opinion would you base the success of an illustration, in terms of its meaning?

On whose opinion ? ...

Q: If you had a publisher's opinion, a teacher's opinion, a child's opinion ...

Oh I would base it on the child's opinion. But a child can tell you when it's not working, but they can't tell you how to get it right. That you've got to like find out.

Q: And the publisher's writing your cheque ...

Ja, but I mean I think they have n't got the foggiest clue, they know nothing about black children, they know nothing about

illustrators either. Ja ...

Q: How do you view the relationship between the visuals, the visual text and the written text?

I think that it has got its limitations, because I think in order for a picture to be visually readable it can't become abstract, so that's where the limit of the thing lies, so if somebody starts talking and there are circles and arrows and puffs of smoke coming out of their mouth, nobody is going to understand, what kind of dream images they are talking about so you have to keep to things that you can actually see. Within that there is an incredible amount that can be done, in terms of, you have to workshop the text and the picture together until they are like both doing the job. And you can get a tremendous way down the road, like people always say we've got loads of talking heads in this book, but unfortunately there is nothing we can do about it. Well I mean, it seems that they don't know how to do anything about it, and they have not even started and the deadline is too rushed to even try. If you take any of these examples, I mean some of these abysmal like little cartoon series that I have had to illustrate, and if you think about them for long enough you find much better ways of saying that stuff, and saying it so that, as they are talking about the plant, and the plant is there in the picture, you know all those things, so that you can see it.

Q: How definitive is the artwork brief that you receive from the publishers?

It depends on who they are and how much leeway they are busy giving. Some of them are very, very definitive and inevitably the more definitive they are the more completely impossibly stupid they are.

Q: Oh really ... so you don't think it's a good idea then for them to be too prescriptive, unless they know why they're being prescriptive ...

Yes, exactly, ja, it's just the things that people don't know why. I don't mind definitive briefs from people who are like thinking about it.

Q: True. Do they provide reference material ...

Most of the time what seems to make them happy is when they've had an illustrator who is experienced and they don't need reference materials because they've done the same like subject for years and years. The reference stuff that I had - I mean years ago I did like biology things that, for X (publishing company), and I had to look for all things like in the library. And relatively I was quite pissed off about it, although I did not have the confidence at the time to say so, but I mean I had to find like these little animals and a lot of the time I could not find a good picture of them. In that case how am I supposed to draw it. I mean the other day I got this thing - fortunately I've been drawing lots of animals lately, so I know what they look like - but the reference pictures that they gave me was so appalling it was way below my like level of natural accuracy. Ja, it was shocking.

Q: Okay, are you given the full manuscript, i.e. the written text along with the artwork brief?

I am given the page that the artwork brief is on.

Q: Okay, so you are never given the entire manuscript so you can't get an overall feel ...

No, I mean there is no desire on their part for me to have an overall feel, really they don't want me to have one.

Q: Are you given a lot of artistic freedom or licence to interpret the text beyond the artwork brief?

Again that depends on who. I think it pertains to the last question as well, ja, I mean the things that I would be pitching for would not really be artistic licence though, I mean I would say that it is more like that they've got books and they've got illustrated books, but they have n't got someone who can design and illustrate a book. There is that section missing in the middle.

Q: So there is that design section that is so imperative ...

Ja, I mean, I don't necessarily want to express myself like as an artist in the book, but I would want to make stuff that is pleasing and understandable and that is interesting to those children and to communicate the lessons that they are trying to learn. That is another thing that I find very important is that they never see the illustration as a way of actually taking the message home, of what they are supposed to be learning. I think they see illustrations as like tarding the thing up.

Q: Do you know if any of the publishers trial or test your illustrations on the children?

I have heard that they do. Like the one lot of people that I am doing, trialling or illustrations for, they want to use those illustrations in the final book anyway. And I am doing the illustrations just to what I understood to be like a pre-test level of comprehensibility so that the kids could see and really comment about it.

Q: So you've done almost like a draft level as it were ...

Ja, I mean draft level enough so that the children would understand it. So that there would be slightly messy lines around the outside of the face. I mean you would know who she is, ja, I mean they want to use them like that, and I'm sort of quite shocked because I thought it was going to be used for one level, now I realise it's going to be used for the other level. There's going to be no chance to touch it up later. And I know from the trialling that we've done of our-children's comic, I know that the stuff that they are testing, I am not talking about the illustrations so much as the content of the book entirely, it is like such garbled nonsense. So they're not going to get a worthwhile response from the children, it is pointless actually trialling it. Because it had n't been sorted out yet. They are not trialling anything that is worth discussing, it is unclear, the text repeats itself, there are like terrible mistakes in that whole thing and I think the children are just going to end up saying, 'Yes, Miss', 'No, Miss', they will be actually so confused themselves.

Q: Do you often have to rework illustrations?

I don't know about often, because I have n't really been in the game that long. The ones that I have had to rework have been often for the most pathetic reasons in the world, the one, they never told me the main character of the book was supposed to be this little coloured boy. I had been told he was a white boy, and I had to take his face out through the whole thing. Meanwhile the reason why they wanted him to be coloured was some nostalgic reason in the head of this author. And then they wanted me to do all these like, funny little things, like, I'm trying to think of any example, but things that did not help the visual literacy at all, it was nothing to do. Maybe sort of nostalgic concerns of the people involved, a sort of socio-political outlook that they had, like they did n't like the fact that I had this little black kid with his peak cap on backwards, they reckoned that, that was Americanised. You know like things like that kind of stuff.

Q: How closely do you work with the author of the text?

I on only one occasion actually met any authors. They are normally these distant characters with a tremendous amount of power to veto what I do, with absolutely no visual knowledge to back up their vetoing powers. I would really like to meet authors. In fact a friend of mine gave me a number of a friend of hers' mother, who is writing history books and I thought I would just phone her. At least if I can work with an author who is making some sense we can discuss the thing at some level because I think there are very, very few authors out there who know what they are doing. From what I can tell.

Q: What areas do you consider to be problematic in terms of artwork briefs and understanding what is required of you?

Um ...

Q: In other words you get your brief, okay, for you what is problematic with the way the brief is presented?

I think the way the brief is given to me a lot of the time, the stuff that is given to me, I know that the pictures are n't going to work for visual literacy in terms of what they've asked for when I know that they are technically impossible or when I know that they are pointless. And the other things that is very difficult is, because I like to put like quite sincere expressions on the faces of these children, instead of just like twee little grins or whatever, then the content of what they are saying is like ... (end of side one) ... then the content of what they are saying is very pointless or very meaningless. It is very difficult for me, because I think that you have to, as an illustrator, have to almost fall in love with every child in every picture. And you have to invest a lot of your own energy in that child, to make them live on the page. And when the things that they are saying are like dead, and meaningless and that kind of thing, it is so meaningless, it really, really is.

Q: Do you find the deadlines, especially if it is a short deadline, quite artistically and creatively constraining?

Not really, because I suppose the way that I have entered into this whole thing is that I know that people get employed in direct proportion to their ability to meet deadlines and I suppose I am quite confident about what I do right now, that I've taken on a stance - I meet all the deadlines ahead of time, because I know that a lot of things have been badly commissioned and are like a big pile of kak - I don't actually, I mean I would like it to become a vocation that I feel deeply about, but when I can't feel deeply about it because of the compromise of the situation then I would rather just go for making lots of money, and that's

what I do.

Q: Make lots of money?

I make a lot of money, ja.

Q: Okay, are there any areas of your illustration that you feel uncertain or unsure about?

Ja, the stuff that I feel most unsure about is that stuff about really knowing those children properly. Unfortunately it is not always stuff I can affect, and that makes me feel very sort of bitter about the whole thing.

Q: Do you feel certain that publishers really know what they want?

I feel that knowing what they want is like a responsibility that gets pushed under the carpet that there is a certain amount of steering things through, that the information that they need to make sure that they really know what they want is just something that never gets done. So it is constantly passed over.

Q: Do you think the situation could be helped by having black illustrators?

Not necessarily, because I think that the problem is that in South Africa, when we were all still at school, black people get a very bad education and that is a reality. People being black, does not really solve the problem. They might be black, but they might not be able to spell. The problem is that until such time as this is fixed up, I think that it is the people who do the job best who have to do the job, because it is for like education, and the stuff needs to be accurate and needs to be good. So I think that what needs to be done, rather, is that the correct research needs to be done is to inform the illustrators that are there. I mean I have often thought about drives that one could have to find black illustrators and all that kind of thing, and I am sure if you've got the right connections it actually is easy. It is just that most of those people are so straight and so square and so conservative that they have never hung out anywhere where black artists hang out.

Q: What do you know about the home environment of the average black primary school child?

Well, only as much as I've been into homes when we've been shooting photo comics. That is like the entirety of it.

Q: What about the availability of television, books, magazines, magazines, library facilities etcetera.?

For them?

Q: Ja.

I know that, that is very little, it is not a focus of their childhoods. Like books are not a big thing, I don't think, at all. I think that the whole way of life in the township is like incredibly different, immeasurably different. I think that a lot of the visual literacy that white children achieve is like purely through, like the books that they get when they were really little. They start to get their first pictures when that are in perspective, and start to understand those types of things. I think those kids don't understand that kind of stuff. I think the power of television and stuff is enormous, and I think there are all sorts of other influences that float around like, lots of children spend loads of time after school watching blue movies for some reason.

Q: As in pornographic? *

Ja.

Q: Really?

Ja, I think because, I think a lot of the time the townships have been so alienated in terms of like the law and everything, the whole area is like, it's people operating outside the system of the given law. So that anything that happens there is almost like the opposite and I think there are lots of people passing pornographic material around because they are busy selling it or whatever.

Q: So they just get it?

I mean a 12 year old child will be sitting there watching a blue movie with her boyfriend. I mean that is also because we have

discussed sexuality with them a lot for the comics and stuff. I would say that books are real low on their agenda.

Q: So do you think that their parents read to them when they were little?

No.

Q: Not. What do you feel about the situation of textbooks for them in the schools ...

I don't really know anything about textbooks in the schools. I've got no idea.

Q: Okay, what impact do you think that this could have on their learning. The fact that there is very little of a literate culture in their home environment.

Well I think that makes them - if you've grown up without computers you become afraid of them. You would be put off from books, and see them as something which is like indecipherable to them, I think that's what I am sort of really afraid of. I think that's what all these highly illustrated books are trying to achieve, it is not just the illustrations that achieve it. It's got to be like the sense that the book actually makes, it's understandableness as like an entire product. Ja, I think it's really crucial.

Q: Do you work from photographs of black people or children, or from your own creative resources?

I work out of my head. I find it very difficult, because I think in a lot of the illustrations, they are just formulated pictures, they've got no like personality, and it takes a lot of time to invest drawings with personality. What I do because I work in a very busy area of town, I go down to Greenmarket Square, with a notebook and I sit there and sketch people's faces the whole day whatever. And then I get configurations of entire different types of faces, and that helps me endlessly. Not only to get different characters, but to break down racial barriers of people. Because you realise that the configuration of face that you get in a pretty white surfer boy, you get like pretty black Rasta boys, you get the exact same ... like the same kind of thing, you can see that they enter the same kind of sub-cultural arena, which they do, except it is just divided by like money and cultural things. The same types of people occur throughout, and there are so many different facial structures that relate to all that kind of thing that I find if I want to do that stuff well, I have to do it in my own time, and I don't get paid for it. If I want to just meet the deadline and just hash it out, that is like a piece of cake, I just do it.

Q: Do you not feel though that negroid physiognomy is different to caucasian ... ?

Ja. It is.

Q: And the shape of the head?

Ja, I mean like when we were in our comic group we tried to get that stuff right over a long period of time. X is very good because he could draw like any kind of type of person, from any kind of culture. We also looked at pictures of people from different cultures, with different shaped skulls, all those kinds of things. So I think that once you understand that kind of stuff, it is easier to draw a person with an actual personality shining through, as opposed to a thing with racial features, like tacked onto the outside. Hiding them as a person.

Q: The following are just aspects of illustration, if you like, I just want you to discuss briefly, your feelings or understanding of them. Cultural considerations, in terms of dress ... that type of thing?

I think that stuff needs to be looked at in terms of what children are actually wearing and in terms of what they like, because they are very like, because they look towards the stuff that is cool all the time. And I have had arguments with people, who are like editors and stuff, that I can't draw this it is too fashionable, because it is like American or whatever, and secondly, because it goes out of date. I think those people have not been in fashion themselves for such a long time that they don't realise what kinds of like groovy clothing actually kind of like stays in. And if you really get a kid looking right, you can make that thing last, I genuinely believe that. You have to know enough about clothing, and what like catches that child's appeal, I think. And the other thing I had, was that I characterized this very, very fat little black guy with dreadlocks, just on the top of his head, coming out like a pineapple, and a big T on his shirt, his name was Thabo, and apparently a whole lot of these little old ladies in the industry, said that caricaturing this guy as fat was making him a laughing stock, and it was racist, etc. And meanwhile this little guy who was spending his school holidays in our office, the secretary's child, said to me, 'He is like the coolest guy, of all these people that you've drawn.' And then he told me why he thought that guy was cool, and I think that, at that level there is stuff in fashion at the moment, of the way that kid's express themselves in terms of youth culture and music and all that kind of thing, where completely different things are cool to the stuff that the adults necessarily kind of perceive.

And I think a lot of the time they are out of touch with that, and they also have these kinds of things, of little girls in those frilly dresses that you get on the outside of the 'Keur' magazine. You know that kind of thing.

Q: And then just more technical aspects in terms of drawing? Shading? If you want to show volume on the face.

Ja, well I kind of learnt about that stuff from X, and the whole way that you sort of deal with that is that you, say if you've got a character looking that way and the light is coming from behind them, you will like shade their bodies but you don't shade their face, because as soon as you shade their face, they start looking hairy, because it comes up as texture on their face, whereas it would n't necessarily anywhere else because faces are just too small and too delicate. You have to find ways of working around all that stuff, working with lots of different thicknesses of pen. So say like you would draw like their noses and their eyes and everything with a much finer pen, and then you might like outline the rest of their body with a heavier one, and then in the end it all looks like one pen, but then in the end you are getting different ...

Q: thicknesses. Okay, then things like foreshortening?

I find that foreshortening I can generally get right but it takes time, and I think that it is possible to do it in a way that is visually readable. If you know what's going on. I think a lot of the time, from what I have seen of other people's illustrations, I think that people draw in such a hurry, and they don't spend time improving what they do, that there seems to be very little ability to see things in three-dimensions. I think that is one of the most difficult parts of drawing. I think it sets apart people who are like hot, from people who are ordinary. It is stuff which I am only beginning to get better at through practising. I think it is those deep shadows which falls on something, like a guy picking up his leg and the entire leg is in shadow. Then you know the leg is coming towards you, those kinds of things help, but they are difficult, though.

Q: And cropping, you did speak it about it earlier.

I think cropping needs to be done very judiciously, and a lot of the time it is not.

Q: Depicting movement? Say for instance a guy is riding his motorbike fast across the page, how would you depict that?

I would use movement lines.

Q: Space, say you are looking at a landscape or a cityscape, scale?

That is also stuff that is all quite difficult, a sort of deal with it in a way that is like aerial perspective or whatever, that is like the lines around the objects in the front are heavier and they get lighter and lighter as you get further and further back, and less and less detail. And then also I find it helps a tremendous amount, if things are in the same plane, like if there's someone leaning on a windowsill, and that windowsill line will touch their elbow, but then everything that is through the window, won't actually touch the edge of the window. So that the space that your mind like fills in, and that helps you tremendously to see space. So that if you've got things like in the distance, like if there are skyscrapers or whatever, the lines of those skyscrapers will never ever touch the ground. You will get the tops of the buildings or the tops of the trees, and your mind like fills in all the parts in between.

Q: Ja, and then this whole thing about semantics and cultural symbolism?

I think that the kinds of images that get done in the illustrations, this also pertains to the last question about distance and all that kind of thing, in the time available and the attention being paid to it, the only way to do it, in like the way that is understood, in the kind of literacy of people who have grown up with books, like Western illustrator types, that is the only way that it get's done. And I think that in terms of understanding that stuff - that you are talking about - of like people with cultural symbols, absolutely no information is given, no attention is taken, to make sure that happens. I mean besides like, looking through, and going like, 'Have we got enough racial groups here, let's put a moslem women in here in a big shroud', everyone knows moslem women wear that, and that's like all.

Q: Do you find that line-drawings are better, than say more realistic drawings where there is a lot more information.

I would say go for realistic, every time if you can, just because of that things we got from the World Health Organisation, about all different stuff, I mean that's what you need. I mean if somebody can draw realistically, if they can't then you've got a problem anyway.

Q: A very broad question at the end, as an illustrator you occupy an important role in the child's actual understanding of the

meaning of the information that is being presented in the textbook. What would you like to see happen in terms of what we have discussed. How would you see some sort of a resolution for this obvious mismatch between, as you said it is like a void, between the illustrator and the publisher.

I think my frustration is, ja, I mean, it is huge on that subject, I want to sort of cry when I think of the meaninglessness of what I do a lot of the time and I think unfortunately there are not a helluva lot of people who are going to be able to help in that area, because a lot of people actually do not know how. I think courses need to be designed and ja, if anybody does end up designing a course which does need to happen. This was all stuff which I was writing down when I met this guy (a commissioning editor for English language) the other day, I was going to tell him, I think that writers need to go on courses about the correct developmental stages of all those children that they are working with, things like that, ja. I think that the people who design the books, and commission illustrations need to go on courses about what role an illustration can actually perform, and how people understand a page. What kind of pages are user friendly and what are n't. Then I think that the illustrators need to go on courses. Ja, I mean just to kind of upgrade their knowledge of all the sorts of things that you are talking about, visual literacy and all that. I think that illustrators need to be supplied with information, like properly researched information.

Q: Who should supply it?

I think that the publishers need to spend money on that. The thing is that everybody else is working for them free lance, and there is no like structured way for information to pass around, the publishers are the people in the middle. And I think that they need to develop that information, properly. They need to be the ones, they are the people who are commissioning illustrations, and editors and stuff need to be well versed with all that stuff, so that when some-one comes in, like an author, they can say this is n't working for these reasons. So that the author does not have the vetoing power, that is complete nonsense. And that they need to be able to like pass on from that point, like stuff which can actually work. And I think that not only do they need to do that stuff, I mean obviously there would be a big financial outlay for them to do that research from the beginning, but then at a much lesser cost, than to check up on it. They need to update it, really not even every year, because children are pretty like universal, but once they've got it in they just need to like see that, that stuff is staying in there.

Q: Okay, do you think that the storybook and/or the textbook is, as one person called it '...a sophisticated cultural product.'

I don't really know that format I am afraid. Well, I would imagine that it is entirely dependant on how well it is done, I would think it is quite a nice formula for doing things, I can imagine that those stories are kind of like terrible, absolutely abysmal. I think that another thing that people get stuck with as well, is that they don't know. I think that people are very, very ignorant about what they have in common with people from another cultural group, that they try to make the stories applicable to a black person, by changing all the things in the room, personal things. But they still have a cross like into another cultural language, and I think that like a black child, could learn a lot more from a properly written white person's story about how people do things than they could learn from a badly written black person's story. I think that the whole sort of thing of thinking needs to be in this black idiom in order to communicate with black people, is a very, very shallow response to this kind of thing.

Q: I agree with you. Everyone is using the terms - this is 'Eurocentric' or that is 'Afrocentric' - give me your view on that in relation to illustration.

Q: I think that there are very, very, very different ways of thinking here ...

In South Africa?

Q: Yes, and I think that those, it is not often necessarily, as being from Europe, but maybe like living in a small town where time means something different to what it does if you are living in a big town or things like that. But I think that a lot of the time that kind of stuff, like what's Eurocentric, gets applied at the wrong level. I think a helluva lot of the time because a youth culture has become universal now. Popstars and people that they relate to, those operate across the board, there's been like a whole culture of world music where you get an Apache indian doing a thing in India, and all that kind of thing. I think the inroads of television and that are powerful to a point where it should become parts of those people's lives. We should n't expect a ten year old black kid not to know what a Cadillac is, you know he does. But I think, ja, it's more - everybody out there is not so mysterious - if you only just took the trouble to go out there and find out who they are, and once you've done that, it makes perfect sense. You kind of get a particular picture of where people move around in a cultural arena, and what they are busy doing. I mean those children are like ready to tell you that, they really are so like you know - like making everything happen in a hut, with everyone covered in beadwork - is not necessarily going to be any closer to their experience than if they were driving around in a Cadillac or whatever, it is finding like those combinations. They are much more likely to

be eating Kentucky Fried Chicken than they are to be, a schwarma. All those sort of things.

Q: What about the whole thing where two thirds of the primary school children are actually rural kids, which is quite a high percentage.

Yes, it is tremendously high.

Q: I did not realise that until I did some research.

That is wild.

Q: While saying that, most of your books could go out into the rural areas, they are the largest user group. So this is what I am saying, not only are we coming from a Eurocentric - by virtue of our being white South Africans, plus we have an urban experience - now some of these textbooks will go to rural black kids. This is what's for me ...

No, that is massive, that is absolutely massive. It is quite fascinating because I have only been told that by you. Ja, I mean I had no idea about that, but I have also been thinking, my God, I must get out there, but I mean I have been into people's homes on trips and everything. But I have n't been into people's homes in the Transkei and I've been trying to work out various friends who have gone and lived in the Transkei for various period of time, and I am trying to sort out in the next few months, where I can actually take time off and go there like with a camera, and interview some people. And all this, I think I am just like doing this on my own. Then I will be the only person whom they can employ who knows that stuff, and that's just crazy. Just even getting the details right, I mean I get this thrown at me about sixteen frame, story about a drought on a farm on Kwa-Zulu. Now I don't even know what shape the mountains are in Kwa-Zulu and that's incredible, I mean you can see the shape of Table Mountain, or somewhere in the Karoo, like hugely, I mean a kid will know instantly whether that mountain is in their area. Because they are so different. I think that I should have got like with that, somebody should have gone and taken a bunch of snapshots of the area. And I get told that black people living on a mielie farm in Kwa-Zulu Natal walk home to their homestead, across the field, I don't know what kind of homestead they live in, and I have had to make all that stuff up out of my head, not knowing if I should draw them in a hut then I've got them completely wrong, because they're not like that, so then the end I drew this very sort of square like railway housey thing with a stoep on the front hoping that, that might exist somewhere in the correct sort of range. But I don't know. But I mean that stuff's terrible. It is the kind of stuff, that a child growing up in the area, those are the things that they know, the most clearly, of everything.

Q: And it is disrespectful in a way ...

Yes, and you are drawing stuff where you have got like all the details wrong. And they are talking about a mielie plant that is drying in the drought and I don't know what a dead mielie plant looks like, so I am just drawing these little sticks in the ground and this child is going to know that this is absolute rubbish that is being written by an outsider.

Q: Or otherwise, what can happen is that the printed word has enormous authority, especially in the textbook and teacher situation, that they actually will believe it, in other words, what you put on the page can be interpreted literally, they interpret it as it stands. Then they may begin to think now these must be different mielies to the mielies we've got in Kwa-Zulu.

Maybe I am wrong, maybe I am stupid, maybe there is more than one kind of mielie.

(Tape Ended)

Appendix 10

Transcription of Recorded Interview with Illustrator Two

Q: Do you enjoy the work you do?

Very much, very much.

Q: It does enable you to work from home, be your own boss, but still earn an income?

I used to work for an educational publisher ...

Q: as an illustrator?

As an illustrator, ja, and I make a lot more money in free-lancing, although you can certainly make a living, sure.

Q: How do you see your role and function as an illustrator?

That is very difficult, because you do things like that, because that is what you do. It is nothing that you set out to do, I am going to change the world, you do it mainly for yourself, I do. You just hope it works. Hopefully you will be able to teach us something.

Q: You said you did not receive any formal art training?

No.

Q: What do you know about your target audience, black primary school children?

Actually very little, but I must say that the illustrations - or the people that I work for - they certainly keep that in mind as much as you possibly can. I find it is not as though you totally ignore that, you know that you are doing it for that particular market and you try to sort of accommodate that market or whatever. As much as you can, as much as you know about it. That's about it.

Q: Do you feel quite familiar with their environment?

No, no, not at all. The only thing that you can do is get what you can from books, you can't really get it from going out there. You just don't have the time, you know. It's a problem.

Q: Are there any areas to do with your illustration for black primary school children, that you feel you would like to know more about.

Well, obviously it would help if you could go say into the townships or rural areas. That would help, but whose going to, somebody has to subsidise that. It is going to take so much time, its a trade off. You're either going to make a living doing illustrations or ... unless the publishers actually subsidise something like that. They send the illustrators out, which is n't a bad idea.

Q: Ja. Are there any aspects that you feel uncertain about, for instance when you get a brief do you feel uncertain about what you're doing?

No I don't. No I don't. One thing I know, once I did a talk for a school in Sea Point, and they also had children that came in from the townships and I was absolutely amazed - okay these are children from the townships and not from the rural areas - I was amazed at how sophisticated they were, that really changed the way I thought about my illustrations. They know what they are doing and they are so keen to be something, it is difficult to sort of not look down on the kids, not to be condescending, because they are sharp.

Q: Do you feel confident about your work, in that respect?

No, I don't.

Q: What do you consider visual literacy to be?

Well surely it is something that is there in order to explain the situation better. That is the main (distortion) what I imagine it is.

Q: Do you know any of the problems that black primary school children have with regard to visual literacy and educational materials ... anything that they may not understand?

Just things that I've heard about, ja, things that people have told me.

Q: Like what?

If you draw ... they don't have this vast understanding of perspective at all, and that if you draw somebody who is in the distance or somebody who is in the foreground, say it looks as if one person is standing on the other's head, and things like that. It becomes extremely difficult to put everything in an illustration on a flat plane, because then they start looking odd.

Q: So how did you hear about these areas? Who told you about them?

Publishers, and authors. We went through the various things, oh, don't cut off people's feet, the legs and that kind of things because they think that the person is walking around without legs. But some of these things - I don't know I don't really agree with them. I think you've got to be able to learn at some stage, that this is actually how the world looks, and this is how it is going to look when you get older. I remember drawing a hippopotamus once, where just the back was showing and its mouth was open, and they came back, and said, no, no, no, the kids are going to think it's half a hippopotamus. I don't know, I can't agree with that.

Q: But I think if the cues are there, water and possibly some vegetation on the bank and a boat, so that it can read as a half submerged hippopotamus, if the cues are built in.

That may well be, though the cues were in anyway. I sometimes think what was it like when I was young, how did I feel about the illustrations and reading material that we got when I was at school, and I used to find them so boring it was terrible. What I like doing in an illustration, you put little things in that, have to do with the little story, if the kids don't see it that's fine, it does n't affect them, if they do - they can only benefit from it, to make it more fun. I always put a sub-plot in there somewhere.

Q: Do you have any sources that you can consult about the problems ...

Oh you mean, their problems, rural kids, no, not really.

Q: Do the publishers that commission you explain much about the situation, that black primary school children find themselves in?

They do tell you about the problems that teachers are experiencing, the way that teaching methods have changed. The teacher standing in front of a class, waving a stick, has changed ... no they do, they do. I think they are quite aware of the problem.

Q: Have you ever been into a classroom situation, say in a township or rural area?

Actually I have, only once. What actually happened was, they took a whole lot of books, and they put them on the floor ...

Q: Who did this?

It was READ.

Q: So we watched to see which books the kids picked up first. Fortunately they picked up those books that you could manipulate in some way, you know the page you had to do something to.

So what do you mean 'do something' to?

Q: You know little pop out books, or open the little thing where you find the bug underneath the leaf.

They liked those kind of books, sort of like discovery books?

Q: Ja, they do.

Have you ever been in a situation where you can actually ask - I'm going to say the children, for black primary school children, otherwise I have to say it over and over again - in a candid way whether they like and understand your illustration? In other words do you like the way I've made this person's face and can you understand the artwork.

No I've never done that. But I have worked with publishers who have actually taken the drawing to the kids, and I've got feedback like that. But I must say the feedback that comes back is so virtually useless, because you know ...

Q: Why?

Because you know, it occurs to me that the feedback you get - I get the impression that the kids are saying what the teacher wants them to say. So it is useless.

Q: So you think then that a different approach to get their response would be better.

Would be better, even if you yourself go to the kids you know. The kids know what you want, they know that you want them to say, 'That is fantastic!'. Because when you stand next to the kids in the library, you watch and see what they take out, they don't have to buy anything its all there, and that's quite interesting. But its to find sort of a pattern to it, its impossible. So I'm just sort of doing my thing, and just hope and pray that the kids like it. It is very difficult I think to find exactly what the kids like.

Q: Okay. If you were told that your illustration was good, or successful ...

Whose opinion counts? Actually the opinion personally that counts is your peers. Truly, I must say I have never thought about the kid's opinion.

Q: What about the people who write your cheque?

No, no, no.

Q: Your friends?

No, no.

Q: Your colleagues?

Other illustrators.

Q: Okay.

Ja, that is whose opinion would matter.

Q: How do you view the relationship between the visuals and the written text?

How do you mean.

Q: There is obviously an interrelationship between the visuals and the written text, how do you think the relationship should be. Am I asking the question properly, are you understanding me?

Ja sort of. The visual text should not be just a straight visual interpretation of what the written text is, that's the way I see it. I imagine it should be, it should be a lot more than what you're getting from the written text. That's the way I think the illustrations should be.

Q: So it should basically explain the text, but in an interesting way?

Ja, that's not to say just the situation that is described in the text. Just to illustrate that situation, what is the point of that, you might as well read it. It's got to give you something else.

Q: When you are given an art brief from publishers how prescriptive is it?

Ja, that depends on the publisher.

Q: Okay.

It depends on the type of illustration, but I don't like that at all. I really hate that. The way I'm prepared to work is if I just have the text and they just say just illustrate the text you know. These are the provisos and just carry on. It is really horrible because you think in a different way to people who think in a literal way and if you tend to have a detailed brief they tend to ask for things that just don't work visually. No I don't like working like that at all.

Q: Is it. So you prefer it if they say we want a picture of X, then you just ...

Carry on, ja. Or if they just give you the text and you just have to interpret the text visually. That's the best way of getting on, for me.

Q: And do they provide you with a lot of reference material?

Again that depends on the publisher, some do. Some don't at all. But I have my own source, like the library. It is much nicer I must admit, because the more resource material you have, even if you're not going to use it, then you get a better feel.

Q: When the publishers give you an assignment do they give you the full manuscript, or do they tell you that on page 42, we want 8 x 10 cm ...?

Well, then it depends on what they want, what sort of book they're doing, if it's an educational book say a book on economics, and you're just going to illustrate a specific question. But if it is a story book the whole text, ja. Actually what most people do, is that they just sort of highlight the relevant parts to make it easier.

Q: Okay. So we also mentioned this thing of you having artistic licence to interpret the visuals beyond the brief. Some do, some don't, but you actually prefer it ... ?

I prefer it, ja.

Q: But then, would you like to work within some parameters ... would you like to know what the children understand?

Yes of course, as long as those parameters are not rigid. As soon as you step outside of those thing, sort of push the envelope, then you know they come back and say people in the township don't wear dresses with dots on them you know. There's always something you know, as long as there's some sort of thing for initiative. But I think it's good, at least you have a basis from which you can start. You are not going totally in the wrong direction.

Q: Do you sometimes feel that you are working in the dark?

No, I have never felt that but, ... no, I have never felt that. But somehow I must say that the message you are trying to get across is just not going to get through in that way, because sometimes I think (distortion) but then you know maybe they are going to pick it up. I hope.

Q: Do you know whether publishers actually trial your illustrations? I know you mentioned it earlier, do they do that as a matter of course or is that just now and then.

I think it is almost a matter of course, the number there are, or the age group, the bigger the project, the more money they are putting into it. Then they really test it.

Q: How closely do you work with the author of the text?

Very seldom, very, very seldom.

Q: Would you like to work more closely with the authors?

No.

Q: Not, why not?

Because then you start getting the author's ideas of what the thing is, what she thinks is supposed to work, you know she's the author, she's written the text. You don't go and tell the author what she must write about. I don't like that at all because then you really get ... they don't think in the same way. You, you should tell them how to do it. Now she could say now, that

there are certain things that are in the illustration, those are things, I mean you have to have in. I am doing posters for X and they say, okay, this poster has to be about pre-school environment but the teacher has to be shown interacting with the kids. Things like that, then you do need a little detailed brief. Or what the teacher has to look like. In that respect you are learning, then it is important. So the specific idea in mind, and what steps you want to bring across.

Q: So then basically you only really liaise with the publisher, generally speaking.

Generally.

Q: What areas do you find to be problematic in terms of the artwork brief and understanding what is required of you ... are there areas you feel could be improved ... would you like them to give you more reference material ...?

Actually, I have never actually had problems in that respect, where I feel, gee I wish I had more. Publishers are quite professional, where you get very good manuscripts, I work for publishers like that. It really depends who you work for. Ja sure, and maybe the individual editors might give you more information.

Q: Do you find deadlines a bit of a problem?

Ja, because in order to make a living you have to take on so much work. Deadlines are a problem, ja.

Q: In that you maybe feel you cannot give the work sufficient intensity and sometimes you just have to rush it?

Ja, sometimes you do, I must admit. But you also make decisions yourself, if you decide this book is important and you're going to put a lot of effort into this book. Ja, its just money.

Q: Do you feel deadlines are realistic, the expectations in terms of how long you need?

No, they always phone you and say we need it yesterday, you know that sort of thing.

Q: Do you feel that publishers really, really know what they want?

No, not all the time. I think that a lot of the thing is that they just have to do it for money. No, I don't think so and I certainly don't think they really care about the kids. I don't feel that it's actually being done for the kids, you are not going to educate the children of the country, oh no, we are going to make as much money as possible. That's true, and that's how it works.

Q: Ja.

Is it working, turn it off, I want to tell you something quickly.

Q: No, I can't turn it off. Look I tell you what I'll do, I'll make a deal with you, I'll give you my word, if I quote you in the thesis, I will tell you what it is, okay?

Anyway, we were doing a - this is an educational publisher - and we had to do a cross-section of an eye, and all we had to do was get the vertical cross-section of the eye. You could see the top and the bottom eyelids. The author wanted a horizontal cross-section of the eye and he also wanted the top and bottom eye-lids, which is impossible because it would shut like that. So we pointed this out to him, and he said, no, no, no, these labels have got to be in. And we just ended up giving him this transverse section of the eye with an upper and lower eyelid in. But I mean some kids somewhere think this is what the eye looks like ...

Q: Do you think that the publishers just overrode that, to get the book out on time?

Ja, absolutely. It's got nothing to do with being an educator - 'we've got to get the book out, the educational department is going to buy the book'. They don't care if the kids are going to learn anything with it or not. It happens a lot.

Q: It happens a lot?

It happens a lot.

Q: So do you ever feel guilty about it, do you feel that what is happening is not quite kosher?

Oh yes, quite often when you do pick these kinds of things up, you object, for sure. Sometimes you don't pick them up.

Q: It's not really your job anyway?

Not really.

Q: What do you know about the average home environment of black primary school children and their culture and how they live?

No, very little, very little.

Q: Would you like to know more?

Ja, sure. But the thing is that there is no place, the kind of books you find on black culture is traditional culture, back then, so you get nothing. There is a big gap in the literature for that kind of thing.

Q: How often do you have to re-work illustrations?

It does happen, but not all the time. It does happen quite frequently.

Q: Do you know much about access to media, to books, library facilities ... ?

Very, very little. You base your whole thing on what was I like when I was young, the kids that you see around you. Its such a hit and miss thing you don't really know.

Q: What about visual literacy?

Rural kids, absolutely nothing, really.

Q: Do you know anything about the literacy levels of parents, and that type of thing?

I must say, they ... I have a char who works for me, and we are quite friendly and talk quite a lot, because I am there all day. So I have discovered the level of ignorance is tremendous.

Q: How do you notice it, what are the things that make you aware of it?

Well, you know. When you speak of things like where I was born, I would imagine X would know about, like where is Zimbabwe, where is ... no idea, of the world outside, just limited to a little section of the township and where she works.

Q: Do you think that the children's parents read to them when they were little?

No.

Q: Why do you say that?

Because the parents probably are n't literate.

Q: Do you think they've grown up with books at home?

No, but I think that .. No I don't think so, books are just so expensive. But I think they listen to a lot of stories and stuff.

Q: On?

You know from the grandmothers ...

Q: Oh, an oral tradition.

Ja.

Q: Do you work from actual photographs of black children or do you use your own creative resources?

Sometimes, ja.

Q: And where do you get the photographs from?

Well sometimes, the publisher supplies it. Sometimes it is something specific, this is the age group and they look more or less like this. But it is not very often.

Q: I have got a list of elements here in textbook illustration. If you can just tell me what you know about them or understand from them. Cultural considerations ...?

What I know about it or what I think about it?

Q: What do you think about it.

As far as illustrations are concerned. I just think it is very difficult if you are doing illustrations to take, you know, their cultural rights or whatever into account because you are doing it for a kind of general well, population.

Q: Do you know much about cultural expectations in terms of dress etc?

Not as much as I should be, but I am aware of those things. Those are some of the things - if the publishers, if they are aware of them - they would tell you about it. It does happen, the publishers sometimes have a person who say usually, from another racial group, to tell them, 'Gee, you know women don't walk around like that', that sort of thing. But if they did n't there would be no way that I would know about that. I do sometimes ask my char if I'm not sure. But I must say the answers I get, I am never sure whether she really understands what I am asking.

Q: Shading, depicting volume?

Actually, as little as possible.

Q: You prefer more outlines?

Outlines and flat, ja.

Q: Foreshortening?

Actually, also as little as possible. Especially for small children, look as soon as you get to older children then. It depends on your market, ja.

Q: So would you say then that you are quite sensitive to the age-group?

Oh ja, hell no sure, I mean as far as colour is concerned. I really do take that into account.

Q: Movement - for instance if a guy is driving his motorbike fast?

Well, then normally you just go with the, the kind of traditional things like you have these little dust clouds. It depends on the age group too, that kind of thing. It depends on the age group too.

Q: Size and relative position? How would you show spatial relationships?

That becomes really very difficult. If they want specific things in an illustration, the only thing that you can do is to put it in perspective. It is very difficult if you do it straight on, you're going to have things in the background being smaller, and in the foreground larger. Then you have problems with the relative sizes of things. And that's when it becomes really difficult. It just seems to me that sometime or other, the rural kids and the teachers and these kinds of things, they will just have to, somehow become familiar with these things. Because it is a big problem. Because sometimes you have a text, and they want a million things in the illustration. It's insane. You can't have them all on the same plane the same distance from the viewer.

Q: And make it all work artistically.

Exactly. Sometimes it just becomes totally impossible. Really you just have to hope that it works you know for the kids.

Q: Are they quite open to suggestions. In other words you might say, listen, this is not working, for this and that reason, what about doing it like this. Or do you just try and give them what they want?

No, I think they are quite open to suggestions. I think a lot of times, sometimes they give you a detailed brief anyway. You don't ask, you get the details. And that's really when you start hitting the problems. Because they ask for things that are impossible. She is cutting material, but she is also asking for the cotton at the same time. You know you start getting those types of things.

Q: Difficult.

Exactly.

Q: In terms of style, what kind of style do you think the children like best ... a very realistic style? line drawings? comic style?

To tell you the truth I don't know which they prefer. It is just the way I do the illustrations I just do all the kind of style that I feel.

Q: So if you feel that, this looks like a jolly book so I'll make it humorous.

Being an illustrator, I think that in the past publishers perhaps felt, we will just put in a couple of illustrations to make it look nice. Publishers normally have a range of illustrators that work for them quite often. I think the publishers should arrange, especially today, nowadays, for these illustrators to go and see what a rural environment looks like, things like that. I think that would help a helluva lot, because we are really working in the dark you know. Or even just a rural township house inside, what it looks like. It becomes very difficult.

Q: I think even if they were n't able to take you out there, they could supply you with, a lot ... (of reference material) but perhaps it is n't the same.

No, it is n't the same as going there.

Q: Do you feel then that - there is an opinion, which has been expressed by publishers - children don't want to be depicted as they really are. They don't want to be shown running around barefoot playing games with stones, they want to be seen in takkies and baseball caps. Do you agree with that?

Well in a way I do actually.

Q: Why is that?

Because it is almost the advertisements that you see. This is not real either, everybody sitting around enjoying a Castle together. But is a way that we would like to see the world.

Q: Is there anything else that you would like to mention, that I have missed, not being an illustrator - things that you have thought about during the interview. That have not been addressed or I have not asked?

How do you judge whether anything or these books are successful or not. I mean as far as things go how many books are you selling. Everything is based on that. You get an illustrator that could do the job, that would make the books sell more. Not an illustrator that is going for the kids the most. How do you judge that?

Q: Okay, lets take money away from it. Basically for me an effective programme would be that children understand very quickly and very easily - I am talking about the average child not a learning disadvantaged child, what was written there. So what we are looking at it is optimal understanding and learning. The relationship between the text and the visuals, would work because they are so integrated. The child would not have to say there's the written text, there's the visual text, that the two would be so integrated and working together so cohesively that they could understand very quickly what the meaning is. If they can't get the meaning, what is being said, then they just block off, then they are not getting the full ...

How are you going to do that ?

(Tape Ended)

Appendix 11

Transcribed of Recorded Interview with Illustrator Three

Q: How long have you been illustrating for?

As a full-time occupation, since 1992, for four years.

Q: The fact that I did bits and pieces when I had the chance, was something I always wanted to do. I lived in England for a while, I did a little bit there. What I did previously was more like design work and poster making and things like that, so illustration was essentially of bits & pieces.

Does this enable you to work from home and still earn a reasonable income?

Q: It is not a brilliant income, it is not very highly paid work. I think ... I am never sure, one has very little contact with other illustrators and that seems to be a feature of the activity as it were. You don't have time to waste time on other illustrators because you want to speak them because you normally work directly with the publisher. So I don't know if I am, to get to your point, I don't know if I'm a slower illustrator than average, but I find that the time it takes me to do illustration I end up with about R 10,00 an hour.

Q: Really, that's not a lot.

No, I kind of work into my illustrations a lot but it does not allow for anything, but the fastest possible response. Which I think connects with what you are saying quite a lot as well.

Q: So do you feel that the financial reward, could determine the quality of the work?

Oh yes, yes.

Q: You mentioned briefly (*earlier, prior to the interview*) how you got involved in illustrating?

Simply as a background thing which I had for years, which was something I wanted to do, I sort of dreamt of it. And when my child was born I left full time employment and decided to try it out.

Q: Okay, how do you see your - obviously you do a lot of educational illustration - how do you see your role as an illustrator?

Um, I am just trying to think about what I do as I do them, um, I see it as ... I try to make the work, the images enjoyable, I try to make them fun, I see them as providing some sort of light relief for the kids and introducing, a funny side to what is under discussion, a textbook or, but looking at another dimension, but one which is entertaining, primarily, and which is, um, which also helps to interpret what is going on in the text. I try to make the illustrations very true to the text in a way, but to try to develop a bit of an angle on it, in other words, a fresh light on it.

Q: Do you have any formal art training?

I trained as a fine artist, donkey's years ago.

Q: And, the target audience, in terms of the educational illustrations, being black primary school children, what do you know of them and about them?

Not a great deal, not a great deal at all, um, I came back here to live in 1983, so I've been back about 12 years now, 13 years.

Q: Before you said you were in England ...

I went to England for 10 years, ja. I worked at X X Project for 10 years, after I came back. Occasionally with children, more with young people ...

Q: the youth ...

the youth, yeah, so the contact I had was with that age group. I had some contact with kids, I saw, I was able to observe a lot of children. And, occasionally, I taught and had contact with them, but my contact with their background and their ... and who they are, is much more second hand in a way, it is like through their people, the adults that I met and the youth kind of.

Q: Okay, what you did do at the X X Project?

I was involved in a poster workshop, most of the time. We were there really, to help people with posters.

Q: In relation to what I have just asked you, are there any aspects to do with black primary school children and your illustrating, that you feel uncertain about?

I feel very uncertain about what happens in the rural areas. I have - apart from classes that I've been to which are mainly in the Western Cape - I have not done that much travelling. I have a sense that I am very vacant on that. I don't know how people dress, I don't know what their houses look like. There are a lot of things I don't know. Occasionally I am called on to do something ... that is an absolute nightmare, I sort of judge it, I can't pretend, that's bad.

Q: I just want to come back to what you've been saying ... do you think that the onus should rest with the editor/publisher, to provide you with perhaps more reference material, in that regard?

I would appreciate a kind of - not necessarily, but I would appreciate a working situation where - some kind of research is understood to be part of the work, particularly if they are dealing with illustration outside of one's own sphere. And I think what I was saying earlier about the kind of deadlines and the way in which it is paid and so on it does not encourage you to do that. When I started, what I did was, I would go out, go to the library and research like crazy, get as many pictures and try to get it as absolute accurate. I am afraid that it's now reached the point where I just don't bother to do that, because there just is n't the time and the job just does n't seem to be worth it.

Q: And the financial reward is not there for you ... ?

It's not there, no. And I know that, one of the first things I was asked to do was a series for, X (publisher). In fact, it was called the X series, about black leaders in the past and their history. And one of the pictures was to be a township in Kimberley, at the turn of the century, and there was not a picture available. I went to the archives and everything, all the pictures of Kimberley were pictures of the big hole and of the rich houses and so on, but there was nothing on the township. When I expressed this as a problem to them (the publisher), they were absolutely astonished that I had gone to the trouble to research it. And they were kind of ... kind of quite irritated, I think.

Q: That you'd sort of unearthed something that they could not ...

unearthed that, and that I was not prepared - at that stage I was not prepared - to draw a picture that was not going to be truthful in some way. All I needed was a glimpse to get something out of it.

Are you satisfied with your illustrations then ... in this respect?

Q: No, I am uneasy about the kinds of things that you are talking about, I am uneasy about the fact that they go out into the void and I never have any knowledge at all. I mean I try to make them nice, so, but I never have any knowledge about how they've been received or whether the children have understood them, where I might be going wrong. There is no feedback, there is no ...

Q: So the publisher gives you no feedback then?

No, I don't know how much they do themselves, once the books have been printed. I know the trialling, it goes out with the trialling, but that's very often with the illustrations, either in rough form, or whatever. As you said it does not seem to be important to send the pictures out for trialling as well as the text itself.

Q: And, in your opinion what is visual literacy, how would you term it?

I suppose it is a kind of fluency in looking at images. Yeah, an ability to look at all kinds of different images, on the same subject, and still be able to recognize that subject for what it is.

Q: Do you know of any of the actual problems that black primary school children experience with regard to visual literacy and educational texts and materials?

I am aware of a couple of things, but I can't remember where I got the information from. I am aware that ... I am just trying to think what I avoid I suppose ... things like you mentioned, the child with the blue face ... things like size and proportion, people cut off in the middle or whatever, odd perspectives, those kinds of things, I think ... overcrowding stuff, putting too many layers of imagery together, losing clarity with what's foregrounded, that sort of thing.

Q: Okay, you said you did not know where you heard about these problems, or these aspects?

No, I think it's probably been with ... first of all what I picked-up was with adults who are n't particularly visually literate, and presented my own work to them.

Q: Would that be the poster work?

The poster work and odd drawings. I did quite a lot of drawings for banners and logos and things like that and I found that ... I think it spills over into adulthood, the, like, visual literacy, and those kinds of things which bother people.

Q: Certainly, and what sorts of things did you pick up with your ...

Quite literal ...

Q: Pardon?

People tend to be quite literal in their interpretation.

Q: Absolutely, what sort of things did you pick up with your posters?

All sorts of things, people were not very excited about artistry in a sense, they were very excited by a very carefully done portrait of somebody. They were not excited by texture or even colour that much sometimes. They were excited by representation and very, very kind of, what I would see as, quite stiff over naturalistic representation. Yeah, just that.

Q: So basically, what you encountered, you encountered in terms of your work say with the X Project and the posters, more on the adult side, although as you said there is definitely a spill over effect ... okay?

Um the publishers ...

Q: Sorry?

It is more a question than an answer to ... I have tended to harbour an assumption for a long time I think, which is that the children are more open than adults to fresh experience, and that maybe therefore one could introduce more, in terms of an illustration for children, than for adults, who would kind of refuse it, because it speaks of things they don't understand and they don't feel they should have to understand. But I don't know, it may be pure illusion.

Q: The publishers, who commission you, do they explain much about the situation of black primary school children and their understanding of visual text?

No they don't, and I think that they probably ... they tend to assume that one knows, something about it. And I suppose it is part of the nature of the business, if I don't know, I tend not to ask as well, which is bad, I should ask. But, I sort of think, oh well, they expect me to know, I should really know which children they are, in Standard Four you know, and what their educational level is. But I don't have that background, so I don't actually know what children are learning at their age. So it is a lot of guesswork and using the text as a guide for what is expected.

Q: Have you been into one of their classrooms or into their areas or have had to do with them?

I've been into a classroom but just visited. I've been into township areas quite a lot.

Q: So you've got a good idea, a good feel of how they learn ... what their attitudes are ... the things they would use in their homes ...

Yes, reasonable I think. But one of the effects of sitting at home being an illustrator means you lose contact with that, certainly recently, I go into the townships much less than I used to. So it becomes a bit of an ancient memory after a while.

Q: Have you ever been in a position where you could ask one of the children, in a candid way, whether they understand what

you are drawing ... and what their responses are to it?

I could probably do that socially, ja, ja.

Q: Sort of with children's friends or ...

Yeah, yeah, and with children of our friends, and X's (9 year old daughter) friends.

Q: Would they then ...

It is not something that I have done. Sorry, go on.

Q: No it's okay, you finish.

I am not sure I would get a truthful answer. I am sure that I could ask questions in such a way that I could get a truthful answer. But I don't know I'd sort of find it, I find it a bit of an imposition, a bit awkward.

Q: Imposition on the ...

The child. I'm not sure how to approach it, I would n't know how to, ja ...

Q: How to perhaps phrase a question, so that they did not give you the response you wanted

Yes, yes, yeah.

Q: If an illustration of yours was viewed as being successful, on whose opinion would you base the success of the illustration, in view of the fact that we are talking about educational illustration. In all honesty.

Well the only opinions I get at the moment are those of my family and ...

she certainly does n't take any notice of them! (her husband in background) (Laughter)

Q: I'll have to put that in.

Well X (daughter) tells me she likes them, if she is in a good mood with me, and if she's in a bad mood with me, she says "I don't love your drawings!!" But she has some perceptions which are very useful.

Q: Really.

Well, just on your question. I suppose if a publisher says, occasionally I have had a, I have had a, usually one only gets the publisher's response. Once or twice I have had something which says, 'I love your illustrations as much as the kids do', or whatever. And it's wonderful, then you think it's kind of really working. It's kind of passive you know.

Q: So they never come to you and say, children in Std 3 just really enjoyed your illustrations etc.

Occasionally, you get that and it is very, very warming and very gratifying. The best people do that, I have not had anybody come to me and say, listen, that book you did just did n't work. I don't believe that, because not all the right things work (distortion) ... and if it does not work they might not use you again.

Q: Which perhaps they should do, so that you have an informed understanding of why its not working and you can then make the necessary adjustments yourself. Okay ... how do you view the relationship between the visuals and the written text as an illustrator? Difficult question?

I can't think how I would define that. Because I have worked with posters and I've worked a lot with text and illustrations together - I mean I've done that for years - and I love it. I actually love working out how I would interpret what it is that is it's that interaction between the two, which is exciting. I just think that the illustration has to give life to the text and to illuminate it.

Q: Okay. How definitive is the artwork brief that you receive from the publishers?

It's often quite vague.

Q: Quite vague?

Mmm. I've just done a book for X, UK, but its ...

Q: Here?

It is produced in UK, but its books for Africa. It is an Africa series, so its for children in Africa, somehow the books go to Nigeria and Ghana, you name it, which is weird. I find it quite weird that I'd doing a book about Nigerians, well its sort of, I'm an African, so I should know what it's like in Nigeria. But um; they give very, very thorough briefs.

Q: Is this X (publishing company)?

Yes, irritatingly thorough. In that ...

Q: Very prescriptive?

There is a chest of drawers on the side of the room and with brightly coloured books. They are not very exciting briefs, they are kind of, they are somebody's vision of what it should look like.

Q: Whose vision would you say it is?

I think it must be the editor, I think she is the one who draws them up. And I find that very hard to work with. But here, normally give very, very loose briefs and the only, they will stipulate for example, that this picture should have a racial mix in it. Or this picture is sort of, I don't know, in a rural area or whatever, but there is not very much ... there is not very much guidance in detail. There is not very much conceptual guidance, I don't think, about how one should understand the racial mix for example. How one should ... what kind of class the children come from, that kind of thing. Do you know what I mean? It almost feels to me like a kind of knee jerk reaction, where you have a racial mix.

Q: Almost like a token inclusion of racial groups, so it's more acceptable?

It's how you contextualise that. Somebody told me that, she worked for some illustrators some time ago and there was a period - it is quite entertaining - which they were specifying where all the pictures had to be set in a ghetto, and that they all had to be racially mixed, so it was sort of like - we are all living in the ghetto now, you know, trying to solve it ... except those kinds of issues are really difficult issues, and one's kind of left as an illustrator to solve them yourself. And yeah, again you don't know what the response is, you almost feel that the publisher's are all going, phew, oh well she managed to ...

Q: pull that one off?

It looks kind of like, it looks not too rich and not too poor. Do you know what I mean? They are all kinds of things which are ... ja. One rates those things oneself, the publisher does n't give guidance on that.

Q: Do you think that they don't give that guidance because they don't necessarily know what they want ? (Switched off tape, background interference)

... talking about kind of, how publishers are at the moment, about how to deal with the new situation. I don't know how we got to that position, sometime in the late eighties, where everybody was in the ghetto and then moved away from that and in order to avoid depiction of any kind which might be offensive or inaccurate, or whatever, they got into animals.

Q: Oh really?

Animals have all these kind of mysteries attached to them. (Laughter). And they could also have cultural connotations. And then they got sub-mammalian I think.

Q: Oh my goodness, really?

And it just struck me as being very funny, because I remember working on a book for X (publisher) as well which was a maths book, and the sort of, little figures which were giving guidance through the book were a worm, a penguin and a seal. So it was like kind of a neat side stepping of having any kind of choosing which kind of child you are going to use for guidance so.

Q: Interesting.

Are you given the full manuscript, in other words the written text, along with the artwork brief?

Sometimes. Sometimes.

Q: Is that depending upon the publisher, or depending upon the nature of the textbook?

Well, it depends on the nature of how much of the textbook I am doing, if it as an enormous one then they give me the whole thing. I was given a brief the other day which did not even have the pages, which they were meant to fit into, there was no context to it at all, it was purely and simply draw a picture of a birthday party, this is a talking head saying such and such, and I insisted on having the pages to slot the images in with the text. I can't visualize it anyway if I don't have the text, or these like measurements, this should be 10 x 2cm and a child doing this. And it was completely (distortion), so I got those pages, but I did n't ... ja. I rarely get the full text actually.

Q: Are you given artistic freedom or licence to interpret the text beyond their brief?

Yes, usually there is quite a lot of freedom.

Q: Except for that one, you said x (publisher) were very definitive.

Yes, even then you can learn to read the brief in such a way that you know which bits are important to which - you know if one chest of drawers are missing, it does not really matter. But normally there is quite a lot of freedom. But I think one probably censors oneself quite a lot. To know what the constraints are.

Q: And do you get that sense from the text?

(Outside interruption)

One kind of ... are you saying do you get it from the text?

Q: So often - if I hear you correctly - you sometimes get the text, you sometimes don't, when you get a brief. So you perhaps don't always know what the thrust of the text is, or that type of thing, you gain it mainly from your brief?

As I said, briefs are usually very, very flat, you know, it is something like, 'There are four pictures, there are three children playing together around a pump, one of them falls down and hurts his knee, the next picture is them bandaging it up'. I mean that's sort of how it goes. If I don't have enough text to give me a context, I usually ask for more, because the text is the crucial thing.

Q: But as a matter of course, do they not give you the text, you said 'rarely'?

I usually get the pages that I have to illustrate, and maybe I will get the chapter. Like with the X (publisher) job, I simply got the pages to illustrate. So they were modules I got and I did like illustrations 4, 5, 6, for that module, so I got those pages.

Q: Was that more of a content subject like, maths, economics, geography ...?

No, it was English.

Q: English? Do you know if any of the publishers will actually trial or test your illustrations with the children, prior to them being printed?

I don't think that they do, no. I think that the illustrations come in at just before the printing stage.

Q: Do you often have to re-work your illustrations?

No, no.

Q: They are usually taken as is.

Yeah, yeah.

Q: Okay, and how closely do you work with the author of the text?

Not at all. Unless they absolutely insist, and sometimes they battle to ...

Q: Who battles?

The author battles to play a role. There are times when I am quite happy to be free of the author, because if I am working with an art director, that I get on with, then its easier not to have the author, who always has another view about what they want. So its sometimes easier for like with story books and things, just to have to ...

Q: to liaise with one person.

But one gets the voice of the author coming through quite a lot through the editors and the art directors.

Q: Would you then like to work with the author, say from the outset, so that you know what the author is feeling, and it is not like a thing where he or she then vets, no I don't like this, send it back. But say from the outset you and the author were to sit down and say, this is what I am thinking, this is what I would like to put across, this is the kind of style I would like - would you like that?

Yes, oh yes.

Q: Then you are not in a position where you have done the work and they send it back and say they prefer x or y.

Yes, its um, its a difficult one, because the authors obviously, because the editors tend to act as a sort of, perhaps a kind of stop gap, not a stop gap ...

Q: a mediator ?

A mediator, they will argue with the author, for whatever it is that's being produced, so you get this picture always of these authors being these terrible kind of picky, conservative, irritating people who kind of wanted something else. Wanted something kind of more boring or whatever it was. So I always feel quite relieved not to be working with the author, but I think it is very, very unfair because the authors are probably, would have some good ideas. Three ways, is actually very difficult, I had that, worked in that relationship before. Because there is always an argument between the editor and the author and then, you kind of get shifted about as a result of it.

Q: How would you then see a resolution to that?

I think what you suggested is good, you know, if one were to meet the author and discuss the work from the outset, and find out what their intentions were and what they're able to do with the work, then that would be great, but then there remains the question who is the decision maker. And then that would not be a problem. If its the publisher whose going to make the decisions, then they would have to take over the position, to say yay or nay.

Q: So in effect you liaise mainly with the publisher or the editor. What areas do you consider to be problematic in terms of artwork briefs and understanding what is required of you?

I think the most difficult thing is something we've already touched on which is ... that there are certain issues involved in illustrating, now, in terms of educational textbooks, to do with, what kind of image one is trying to project. I mean I know that X (publisher) for example have this philosophy on the textbooks that they produce, anyway, is about projecting images which are going to provide aspirations. A kind of life other than a ghetto, so its like quite a lot of pictures of nature, quite a lot of images of children doing things which they probably don't do in the townships, like going on picnics, playing in parks, all stuff like that. Now while my sympathies lie with that, obviously ... obviously one wants people to have a better life, and to have aspirations for a better life. On the other hand the concern is that it does not match with reality. And also that the kind of aspirations are kind of one-dimensional, it tends to be about nature and family. And the promotion of the standard nuclear family, and that being the ideal model. There is a lot of projection about that, it would be lovely to listen to the birds singing and so on and so forth. All of which may be perfectly true, its seem to be replacing, it seems to be saying, you know, township existence is deprived, here is another kind of existence which is the right one, this is the one you should be desiring. And the values which that stresses - and I feel uncomfortable with that. But mainly I think with the dislocation between the real life that children have and the kind of aspirations they might develop out of that life, and this other kind of thing, almost (distortion) , this pretty world, which they are being told it is nice to have it. And I just think that stuff like that needs to be, it needs to be worked out, it needs to be talked through. And in fact they were quite open, toward my coming and bringing comments like, I don't kind of go with this and I don't quite like that, but, and I started out like that. But again, its this whole thing of the pressure of the work.

Q: Ja, and they've got their deadlines ...

They have their deadlines, and you sort of think, well this drawing is worth fifty rand, am I going to spend time going to the publisher, discussing it through, phoning them up, trying to contact them, checking that, this that and the other thing - whereas I know that I can get away with X and it becomes a bit sort of ... I think that is one of the problems, people can get into a mould, and then they stay there because its safe and produces relatively fast and then you know that nobody's going to complain. Just wait for the day when they sweep you out of the door with a broom, for a fresh person.

Q: And you never knew why?

You never knew why!

Q: Do you find the deadlines quite constraining?

Yeah, although even with long deadlines its the - I keep saying this it must be boring - its the amount of work that you have to take on. So even if people give you three months, very often they make the deadline much too short, they give you very, very short notice. (Distortion) work right until the last minute, to sort out the illustrations. But even if there are long deadlines, its just getting the work out, that's the problem.

Q: Do you feel certain that the publisher really knows what they want, or do they leave a lot of the interpretation - you mentioned earlier, that they assume you have a certain knowledge - so do you think they know what they want or do they hope that you are going to 'foot the bill'?

Yes, I think they do go on looking to the illustrator to be creative about the solutions. I find that people are quite open to whatever solutions I have put forward. I do sometimes feel that they are just not bothering to do the work, not bothering to do the thinking themselves - oh well, lets give it to the illustrator to solve the problem.

Q: Do you think that its because of a lack of knowledge on their part?

I think they're probably out of touch, yes, a lot of them. I don't know how much they ... I know that I did a cover for X (publisher) and they took it to the - they wanted to pilot it - and they took it to the school which is around the corner, which is in X (predominantly white Cape Town suburb), they did n't go any further than basically their own back door, to check it. Just a minor thing to check whether people like it or whatever, but they did not think to go, or they did n't bother to go any distance at all to the schools where the stuff was actually mainly aimed for.

Q: So you say it was actually intended for black primary children and they basically piloted it in a white school? Do you know about the availability of media, books, magazines, library facilities, that the children have access to - black children?

In some schools I believe that there is absolutely nothing. I think that a lot of households that children come from, they don't read. People don't read at all. They may read a newspaper, but there are n't books around the place. And as the children when they get older, they start to use the public libraries and things. As primary school children, I don't know, I don't know how much teachers, good teachers would take children to a library. With schools as crowded as they are, and with teachers as pressured as they are. That black school children have very little access to reading material. Again, I was talking to somebody about interesting work done on a project, the one who spoke about sub-mammalian textbooks, and she was working with two teachers in Mannenberg and encouraged them to write their own textbooks, their own story books because they had exactly that problem, their children had grown up without even seeing anybody read in their homes. And one of the solutions that the teachers came up with was that to replace the mother role, when the children learn or read, by taking them onto their laps and hug them while they read to them. So that children had some experience of that being ...

Q: Positive.

Reading as a positive experience, which children from our background obviously have the whole time, because that's how they learn stories in close, whatever. So I was quite touched by that, it is a wonderful solution. But they also did end up writing their own textbooks. Apparently what she said they came up with in terms of their own stories was extremely conventional, it was very close to the kind of Janet and John type of story. Although, I suppose the names were more local names and so on, but they changed the race biases or the gender biases or whatever of the books. They simply wrote them more from the point of view of the Mannenberg child, so its kind of interesting, I think its a very interesting project. I'll see what happens to it.

Q: Very interesting. What impact then do you think that a culture of literacy would have on their learning?

What we've just been talking about is one thing, that there is not a culture of it in the family and it becomes a very cold,

depending on how its taught, it can be very cold and forced in a sense.

Q: So its not an informal process?

No.

Q: Do you work a lot from photographs, say of black children, or actual photographs of whatever you are illustrating?

No, not much no. If I cant draw an animal that I'm not quite certain of or whatever, then I use photographs. No, if I draw people I tend to work from my own head. What I have done is that, I have drawn up a list of various aspects of illustrations, more technical in nature, if you can just describe to me what you understand and know about them.

Q: For instance cultural considerations, symbols, clothing, that kind of thing, traditions, traditional cultures?

As I said, rural areas fill me with a real sense of panic. I just feel that if I'm going to draw pictures of children in rural areas then I have to just go, I have to just travel there. I am just clueless and I am ashamed to ask black people who know, because I am so clueless. I don't know. I do ask if I'm desperate, but I'm ... and the same applies to symbols. In a slightly different context, I did a booklet for the Constitutional Assembly which used an owl as a teaching figure through the whole thing.

Q: Wise owl?

Yeah. And then somebody decided to go and ask, I suppose I should have asked as well - it was kind of my usual work pressure. They asked what is the meaning of an owl in the Xhosa tradition? The person said it is a symbol of death. It means terribly bad luck. And then I went to ask more people and everybody confirmed it and they said, 'Oh no, if there's an owl anywhere near your house, then you would probably be visited by death or disaster'.

Q: Oh dear ...

So if somebody thought it was ...

Q: on the Constitutional Assembly ...

how would you react then?

Q: So you had to re-do that whole ...

Yeah, I did, I put in a lot of birds in the end which was a completely non-bird, but again this is where I could have gone sub-mammalian and played it very safe. Yeah, I don't know enough about that either, I don't know enough about folklore, symbolism and so on.

Q: And just basically technical things like shading, showing volume or texture ... You spoke about it earlier, about your posters ...

Yeah, that was one thing, the flatter the image the more abstract it appears, I mean I shade everything I do. I use tone and water paints. But definitely I think that one needs to put something down and put it into space as well. Shadow under the feet or whatever, to give a sense that it is placed in a space, and not floating on a page.

Q: Things like foreshortening, do you every come across it, or do you just try and avoid it?

Of people or...?

Q: Yes, mainly people. If someone was say kicking a ball towards you, would you show it ...

I mean, I cant draw foreshortening to begin with, I would turn it around.

Q: And then you did speak about cropping or truncation ... try and avoid that where possible?

And showing movement, say if someone was riding a motorbike very fast, how do you show that?

I use movement lines a lot.

Q: Just sort of horizontal lines?

Lines, like this hand is moving ...

Q: outside, lots of little lines?

Yeah.

Q: One of the areas that I think everybody knows about is perspective ... people not being able to understand perspective. How would you show space, or perspective, say in a landscape, a house in the background ...

Uh, difficult question. Depends again ... my perspective drawing is not good. I try to avoid it. I think again it would be, if its just black and white if its a simple drawn image, I would just keep it as simple as possible, keep it down to the absolute minimum. The more layers there are the more difficult it gets for people to interpret, I would rather leave something out than keep adding in. I don't do very literal illustrations, sort of like super accurate pictures of say township stuff, with lots of houses, I suggest stuff rather.

Q: Something I also wanted to ask you was, the ages of the children, do they tell you what age group, do they explain to you what their cognitive level is going to be, in other words at this age they would be learning about such and such and they would have the following skills?

No. Not very much. No, it is something you have to try and think of yourself.

Q: Okay, that is basically the end, but, I would like to ask you, as an illustrator you occupy an important role in the child's understanding of textbooks and their meaning, what would you like to see happen in terms of what we have discussed and what would the resolutions be? What would you like to see happen?

I would like to ... first of all I would like to ... I would like the whole process to be a deeper one, I would like to spend more time on whatever the project is - usually, not always - I mean it is sometimes just little icons, where it is more substantial I would like to spend more time with the publishers working out what the illustrations are supposed to be saying, instead of just receiving information and trying to digest it. What we talked about, the author, and knowing more about the kind of intentions of the book. And something I've been attempting to do, I've fallen back, which I have n't done. Spend some time in classrooms with materials that I've been a part of making, or even not, even if they're other materials. Just watching the teaching process, watching how the teachers are using materials, what their comprehension ... the way that they use them as a springboard. Because quite often I think, I'm going off a bit, but quite often when I am working on an illustration I would like, an ideal situation, where a teacher says, look at the picture ... you can see x, y and z going on in the picture and that's why we are talking about such and such in the text. Do you know what I mean, so those would be as a reference to ... or if the teacher draws attention to what aspects the picture is doing ... trying to be. I don't know how much teachers do that, I think they probably have - everybody has their difficulty which we talked about. Really having difficulty with the pictures and also trying to get through the syllabus. I think they should be sufficiently entertained by the illustrations to want to do that. So I would like to observe that and I mean workshops, yeah. And I think what you are doing, much more investigation would achieve a lot, with what's happening in those relationships. The bits and pieces I got from Grahamstown, Kenyan Tomaselli¹, did that work, its like a mini bible, because its the only - a certain amount of information from elsewhere - but locally its the only information I am aware of about how people are reading images. Its like I always have to refer to it. Ja, so much more research and much more feedback from the publishers. Much more of an integrated relationship. Not so much like a workhorse, where you churn them out, here's your money and you do the next one and its disheartening, you lose a lot of spirit.

Q: So do you feel that if there was more of that sort of a process, would it encourage you to stay in illustrating, and if the money was perhaps more rewarding.

Oh yes, ja, ja.

Q: So you would n't feel so isolated?

I am always kind of saying this, and it must bore you to death, but I often feel like a squatter or something, I feel like a little worm. It does not seem to be taken seriously enough, for me. Which is like personally, its demeaning. Like we're at the end of a long run of decisions that have already been made somewhere else and if you're expected to be obedient to them, and if

¹. Media Graphics as an Interventionist Strategy, 1983.

you're obedient to them you can't really go wrong. And its not a, there's no vitality in it so you do end up in a way (distortion). Its not a very creative way to be illustrating textbooks in isolation.

Q: So your attitude then, your isolation, would be reversed if you felt more an integral part of what is happening?

Yes, ja. I think that the X (publisher) project is probably the first, the first time I have been invited by anybody to make any comments, on what I have been presented with. (distortion) But generally it is absolutely taboo.

Q: That is very wrong, because if you measure up how much space they give to artwork, it is often 50:50 or there is more artwork in terms of actual space than on the page than the text. But I suppose it depends on what subject it is. Therefore, I feel the artist has a crucial role to play in the child's understanding of meaning. It is just as you said an endless string of people, and she or he is given two or three weeks to produce. I think that the whole process needs to be reversed and at the outset the artist, designer or art editor and if possible the author, can work on it together right from its very inception. Work it out and then I think you will feel you have a far more valuable role, in a process that you would feel part of and not just sort of coming in at the end. That is what I have most definitely found to be the weakness and would strongly submit that, that be done. It is not difficult, it might cost them a few extra rand, and a little bit more of their time, but at the end of the day we will have a better product and a happier relationship with the illustrator, editor and author and everybody. Where you could say hash things out with the author, have you thought of this, and well, I cant fit a whole street scene into 2 x 10 cm or whatever.

Because there is also the question to the publisher about what is the social responsibility. I mean I know that they are private companies, but even a publisher like X, the whole things is handled at a kind of like big rush. And they are attached to X Trust, and they should know, they were set up as a socially responsible kind of organisation there to promote literature for a South Africa that was changing, do you know what I mean. (distortion) Just chucking the stuff out to children, you know. I am not sure what the education department is going about this, maybe its too arcane to get into this.

(Interview Ended)

Appendix 12

Postal Questionnaire to Author One

Q1. As co-author or author were you satisfied that the publishers carried out the art brief satisfactorily, iow, were you satisfied with the quality of the artwork and does it suit your needs?

- a) They are accustomed to a system in which 'artwork' is the last stage of the process. As a consequence, their approach is to bring in an artist very near to the end of the process, give them a reasonable brief and a copy of the text and then expect the artist to produce the work as soon as possible. This means that there is very little time to make changes if necessary.

In the case of the XX, I gave them a comprehensive art brief in writing as well as the full text which the artist had to read to 'get the sense' of what each picture required. In addition, I flew to Cape Town, at the X's expense, to give the artist direct verbal input and guidelines as to some of the main techniques and styles to avoid etc. (I did this because I did not believe that the editors, etc, knew enough about the issues.)

- b) The publishers were very supportive and co-operative in letting me have my own say and in letting me have access to the artist etc. They were eager to learn what they could, by means of their editor working closely with me, but - they have a commercial system in place which is not as flexible as it should be. They also have high personnel turnover rates so that one seldom works with the same person for the complete process etc.

In spite of all of the above, I think they did a pretty good job.

Q2. Did you supply X with a lot of reference material, along with the brief, so that there would be little area for misinterpretation?

See 1. above. Any more than I gave them would have been a waste of effort. Nobody wants to read articles, books etc - they just want you to tell them what to do. Besides, the artists are free-lancers - the company can't force them to read more than an art brief.

Q3. Was it your choice to use photographs?

No - they suggested and I agreed.

Q4. Are you aware that lot of detail in the photographs has been lost, rendering the picture rather unclear in terms of what it is meant to represent?

Yes - but this was a consequence of the last-minute approach discussed above. When deadlines have to be met in the real world, compromises have to be made - even with the best of publishers.

Q5. Are there any other comments you would like to make in this regard?

We are regarding the first published version of the XX (as we always do with all of our materials) as an extension of the trial materials. The first published text (and illustrations) have to be regarded as much as trial materials as do the 'experimental' materials precisely because they inevitably reflect or incorporate aspects of the publishers's 'touch'. They do have certain rights to expect certain conventions to be adhered to. In spite of the fact that we educators like to think we 'know a lot', we have benefitted from the publisher's expertise in many respects, but still believe that there is along way to go in terms of properly informing and sensitizing commercial organizations as to chalk-face educational needs - glossy books and high-tech conventions which make for a 'marketable product' on the surface, are not always appropriate or accessible to underprivileged teachers and learners who are uninitiated in their interpretation.

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