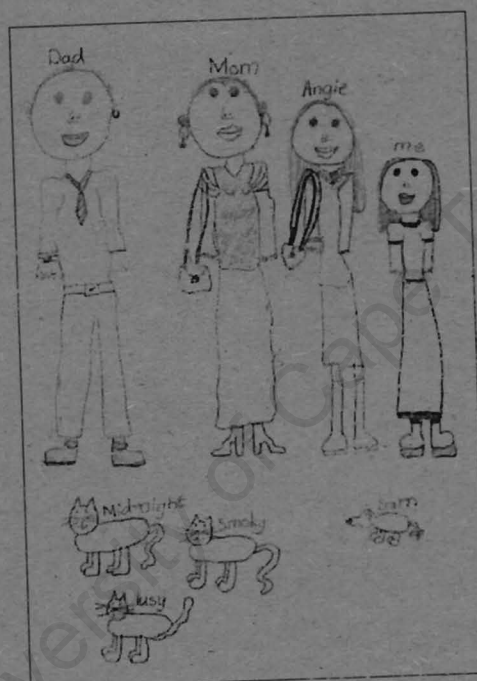


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REVIEWING LOWNFELD:
THE SCHEMATIC DEVELOPMENT OF CHILDREN
IN THE TWENTY FIRST CENTURY

Sandra Johnson JHNSAN002



A minor dissertation in partial fulfilment of the requirements
of the degree of Master of Education.

Department of Education

Faculty of the Humanities

University of Cape Town

2004

This work has not previously been submitted in whole, or in part,
for the award of any degree.

It is my own work. Each significant contribution to, and quotation in, this
dissertation from the work or works of other people has been attributed, and has
been cited and referenced.

Signature: Signature removed

Date: 16.05.04

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Acknowledgements.

I offer my deepest and most heartfelt thanks to Joan Dorothy Malherbe, for her constant support through two years of research; for allowing home space to become work space, and for her care and nurturing.

I am grateful to the principals and staffs of the four schools who gave me samples from their learners. I have agreed not to name the schools, but without their ready assistance and support, this research would not have been possible.

I have valued the support and discourse offered by Elske Maxwell, Evelyn Howard, Amber Fouche, Philip Thraves and Ron Taylor throughout this research, and for their suggestions and advice I give thanks.

Rolf at the Cape Technikon Library, who demystified the Web for me, was a kind and supportive colleague.

Henry Davids at the University of Cape Town offered guidance and kind support.

My absolute gratitude and thanks go to Nigel Bakker, who, throughout the process of this research, has challenged me, inspired me, and has offered wisdom, guidance, support, humour and sanity. The words '*I could not have done it without you*' have become a cliché, but in this case, they are entirely true.

INTRODUCTION

When children discover the ability to make marks, a journey of exploration begins that is both fascinating and inevitable. One could almost believe that they have attended inter-uterine art instruction. According to Viktor Lowenfeld¹ the intentional, spontaneous drawing of children follows a typical development that appears structured and predictable.

The understanding of these developmental stages has formed an important part of the training of primary school art teachers at the Cape Town College of Education for decades, and is currently still used in teacher-training in the Cape Technikon Education Faculty. Schirmaker (1988:85) states that there are a number of theories of artistic development of children, which may fall into physical, emotional, perceptual, cognitive, general developmental or cognitive developmental categories. These theories equip us with an understanding of the child's development, offer appropriate expectations, assist in the planning of the art programme, and give a framework for assessment and evaluation.

¹ All references to Lowenfeld, throughout this dissertation, and apart from where otherwise stated, are taken from the following book:
Lowenfeld, Viktor; Lambert Brittain, W, 1970. *Creative and Mental Growth*. New York: The Macmillan Company.

Viktor Lowenfeld offered a series of stages that belong to the category of General Development.

Art teachers are provided with a visual record of the child's cognitive, emotional, creative and physical development, and are thus able to create meaningful learning experiences. The beginnings of abstract understanding are given visual form. Children show developing awarenesses of selves in a world that is challenging and strange. Awarenesses of human relationships are set out in complicated array against a simple white ground. These spontaneous drawings are children's attempts to communicate the meaning that they are in the process of making of their worlds.

If we asked children to verbalise these understandings of their worlds, they would be limited to their own vocabularies, and would struggle to include the variety, the detail and the rich information contained in their spontaneous drawings. They would also not be able to tell us that they have reached the stage where they can begin to understand abstract relationships, and are therefore ready to learn to read. They would not be able to include that their perceptions of themselves have changed sufficiently to enable them to understand that they form part of the world, part of society, and are therefore ready to start formal schooling. As they

grow, they would not be able to impart the way they feel about their worlds any more eloquently than their drawings tell us.

As children develop physically and intellectually, their development is revealed in their drawings. In 1947, these creative stages of development were recognised, named and recorded by Viktor Lowenfeld, an art educator working in America. Since then, they have become a guide for art educators in the Western Cape, and are used as a basis for curriculum planning. In South Africa, a new curriculum is currently being introduced into schools, and is still in its infancy. It seems an ideal time to test the theories of Lowenfeld against the drawings of children who will be the first learners of Transformative Outcomes-Based Education.

CHAPTER ONE

VIKTOR LOWENFELD.

Viktor Lowenfeld was born in Austria in 1903. After earning a doctorate in Education from the University of Vienna, he taught art at the Jewish School for the Blind. In 1939, at the outbreak of the Second World War, he fled to London, and finally relocated to America.

While teaching art at the Hampton Institute in Virginia, he developed a particular interest in the artwork of his African American students. In observing their work, he explored how their cultural experience affected their style of art-making. He came to believe that when artists drew from their own experiences, they created aesthetically authentic artwork.

This belief came to influence his own style of teaching, and in 1946 he moved to the Pennsylvania State University. It was here that he developed and named the schematic stages of development of the young child. The first edition of his book, 'Creative and Mental Growth' was written in 1947.

This title is currently in its tenth edition. Lowenfeld studied the spontaneous drawings of children, and carefully described the typical developmental stages that he could identify in these drawings. In the researching and naming of these stages, he provided a valuable tool for art teachers of subsequent generations. They could arrive at a deeper understanding of the developmental stages of the children in their care, and thus develop an art curriculum that enriched and extended this development through the vehicle of creative visual arts teaching.

Art therapists still use his theories to aid their understanding of children's development as perceived in their drawings, and art teachers use his schematic stages of development every time they plan a meaningful art lesson. Student teachers are guided to plan age-appropriate lessons by using the descriptions of the stages of development as their measure. Art aims and topics are thus chosen with the schematic stages in mind, as are materials, techniques and size and format of paper.

LOWENFELD IN CONTEXT

As early as 1895, there was an interest in the mark-making of children. According to Streven (1968) Sully, in his *Studies of Childhood*, created a platform from which later psychologists would continue research in this field. Using drawings supplied by Cooke, he analysed and classified the stages of development that were easily recognised in the sample drawings

completed by children. Some of these psychologists who recognised the significance of this work were Kerschensteiner, Levinstein and Stern, but the most acknowledged of that time is Burt, who defined the stages most rigidly in his *Mental and Scholastic Tests*, written in 1922.

His investigation of Sully's work revealed that Sully recognised the development of a schema, or pattern, in children's drawings, and that the child used the schema in order to repeat ideas. Sully speaks of the 'lunar scheme of the human face' and of the 'well-known toasting-fork or rake hand'.

Steveni (1968: 56) writes that Sully published the 'first coherent attempts to classify the drawings of children', and that this publication had a deep and lasting effect on art education. Steveni quotes Kellogg and Lowenfeld as two art educationalists who were influenced by Sully's early writings.

Sully also acknowledged that children from different nationalities appear to use similar images. Even Sully, however, did not recognise the value of children's drawings, but saw them rather as a kind of play activity through which a child had to progress before art-making began. In the late nineteenth century, Post-Impressionism had not yet come to be recognised as an important art development, and so the impact of early mark-making was not significant on art education. Macdonald, in *The*

History and Philosophy of Art Education, (1970) suggests that this is because child art was not recognised as art, but was seen rather as a type of play activity that was the precursor of art-making. Therefore, the primitive elements so often found in child art were largely unrecognised and undervalued as expressive art.

Mackenzie (1955: 2) recognises that child art moves through stages. She names them the mark stage, the formula stage, during which the head-formula indicates the beginning of rapid development, and the realism stage. She acknowledges that children may move through the stages at different levels, and may even revert to a previous stage if they are bored or tired.

Finally, Cizek, (Macdonald, 1970) an adherent of Modern Art, claimed that child art was art-making in its own right, without being inadequate or a developmental step towards pure art-making. He called it 'the first and purest source of artistic creation', and stated that once it had flowered, it would never again be experienced. Both Lowenfeld and Kellog (1970) concur with Cizek, and Lowenfeld calls the first conscious marks made by children the 'first aesthetic response to the world'. In *The History and Philosophy of Art Education*, (1970), Macdonald states that the circle is the most commonly found schema, and that it served for heads, trees and similar objects. Various other geometric objects like rectangles, triangles

and squares, were evident, but interchangeable. The basic schema appeared to be geometric, with other symbols representing details added to these basic shapes.

Mussen, Conger and Kagan (1969: 162) describe the schema as a memory that is not a photographic image, but rather a 'caricature that highlights the most distinctive features.' They acknowledge that the oval of the human face is one that infants will remember.

Rhoda Kellogg (1970: 15) describes the kinds of scribbles that children make from the age of twenty four months. She claims that the twenty basic scribbles that she has documented are the 'building blocks of art' (1970:15), and she traces the development of the circle, (documented by Lowenfeld as the first geometric shape that a child is able to create), from a Mandala to a sun to a circle. (65) The Mandala has a cross through the middle of the shape, the sun has radiating lines that emanate from the shape, and the human circle has facial features, and often limbs which extend directly from the head.

Lowenfeld recognised the significance of the circle in the development of the aesthetic awareness of the child, and states that it is part of the first recognisable symbol achieved, which is a man (Viktor Lowenfeld/W Lambert Brittain, 1970). The circle represents the head, the body, the eye,

the hand from which fingers emerge, and the sun from which rays stream in the corners of most pages.

Lowenfeld continues to describe the schematic stages, and their deep implications for the emotional and physical development of the child. The Scribbling Stage is divided into Disordered scribbling, Controlled Scribbling, and Named Scribbling. This is followed by the Pre-schematic stage, which in turn leads to the Schematic Stage. Lowenfeld considered the Age of Dawning Realism, or the 'Gang Age' to be the final stage through which children pass in the elementary school.

He describes the Age of Reasoning, or the Pseudo-Naturalistic Stage, as the stage of early high school. I shall not be investigating this stage for the purposes of this research.

Lowenfeld plotted the stages as early as 1947, and by 1970 was writing with W Lambert Brittain, who, in the same year, co-authored the Fifth Edition of *Creative and Mental Growth*. In 1979, Lambert Brittain produced *Creativity, Art and the Young Child*, in which he charts the schematic stages of Development in similar ages to Lowenfeld. He, however, names them as Random Scribbling, Controlled Scribbling and Named Scribbling. The early representational attempts are named the Preschematic Stage, and Lambert Brittain does not proceed beyond this point in this work.

Stevani (1968: 66) describes Lowenfeld's book as 'most important', and briefly describes the schematic stages according to Lowenfeld.

Howard Gardner, in *The Arts and Human Development*, (1973, 160) says that 'babbling and scribbling are simply new forms of making activity for the child. Very soon, however, these making activities acquire symbolic overtones as the child comes to relate what he has "made" to objects and aspects of his experience....' Although he agrees with Lowenfeld when he acknowledges the value of scribbling, he does not give this activity a name, or call it a stage of development. He also does not continue to chart the development of the scribbling stage into the representational images of the Preschematic Stage. He comments on the findings of Rhoda Kellogg (216) whom he describes as 'a thoughtful student of children's art'. Gardner says that on average, a child can draw a circle at three years of age, a square at four, a triangle at five, and a diamond only at seven. These ages concur with the ages recorded by Lowenfeld and Lambert Brittain in the fifth edition of *Creative and Mental Growth*. Gardner continues by stating that many psychologists have plotted the stages of drawing through which children pass, and that there is surprising conformity in their findings. He does not name these stages, although he offers a brief, general description of each (217). He quotes Schaefer-Simmern's claims, made in 1948, that all spontaneous drawing passes

through the same development, starting with circles, and figures against a ground. The second stage is an extended circle, with greatest contrast between the highest and the lowest segments; in the third stage, the figures begin to touch, although no tonal values are depicted. In the fourth stage, there is an ability to use tone, and to understand perspective. Schaefer-Simmern states that this final stage can only be achieved by adolescents, although Gardner himself has found no support for this claim.

These stages may roughly be fitted into Lowenfeld's schematic developmental stages, although Lowenfeld has described each one in much more detail.

Later, writing in 1978, (*Developmental Psychology, An Introduction*), Gardner describes the development of children's drawings in more detail. He once again quotes the research of Rhoda Kellogg (1970), and Schaefer-Simmern (1948), and begins with scribbles that develop into lines. He says that by the time children are two-and-a-half, they can draw circles and crosses. Some time between the ages of three and four, children begin to draw people, animals, buildings and vegetation. Only by the time they enter school are they able to declare their intention *before* they make a drawing (334). By the time they are seven or eight, children attempt realistic representations of their worlds. This once again concurs with the schematic stages described by Lowenfeld. The Preschematic

Stage basically embraces children from seven to nine years old, and Lowenfeld says 'it is possible to think of drawing by children of this age as evolving from an undefined collection of lines into a definite representational configuration' (119).

In the third edition of *Emphasis Art*, (1977) Frank Wachowiak describes the drawings of children from five to eleven years, and once again, these descriptions concur roughly with the findings of Lowenfeld. Wachowiak does not name the stages, nor describe the importance of the development, but rather describes what children at each age are capable of, as a guideline for teachers of art. Coupled with these descriptions, he also offers descriptions of what children are like in each age, and the kind of art-making that will appeal to them.

Njoroge-Kamau (1979:1X) makes no mention of any stages in the development of children's creative manifestations, but writes that in the lower primary school, children are enthusiastic about drawing. He warns that by the time that children are ten or eleven years old, they will begin to become aware of their short-comings in their drawings. This age is roughly the one that Lowenfeld describes as the Stage of Dawning Realism, where he also writes that children become less confident in their drawing ability.

Lark-Horovitz, Lewis and Luca (1973: 7-14) use the terms 'Scribble Stage, Schematic Stage, (which includes and describes the Preschematic Stage), and the True-to-Appearance Stage to name the stages through which children move in their creative development. These ages and stages align themselves very closely with the stages described by Lowenfeld, and the descriptors are very similar.

Vygotsky, in *Mind in Society*, (1978) says "In general, we are inclined to view children's first drawings and scribbles rather as gestures than as drawing in the true sense of the word" (107). He acknowledges that children are 'much more symbolists than naturalists' (112), and says that children draw what they experience and remember. Lowenfeld says that all children's drawing in the early years is a response to their experience of the world and their environment.

According to Schirrmaker, (1988: 96) Piaget did not believe that it was possible to plot children's creative development in stages. He stated that he found children's artistic development to be retrogressive, because younger children appeared to be more creative than older children, and that creative development therefore goes against the principles of progression. Piaget believed that drawing was a form of symbolic function, and he described it as 'functional pleasure'.

Schirmaker comments that Lowenfeld's stages seem to coincide with those psychological developmental stages plotted by Piaget. The Scribbling Stage coincides with the Sensory Motor Stages through to the Preconceptual Stages. The Preschematic Stage coincides with the Intuitive Stage. The Schematic Stage coincides with the Stage of Concrete Operations, and the Stage of Dawning Realism coincides with the Stage of Formal Operations.

Piaget's theory of regression seems to be supported by Jameson (1971: 7), who says that by the age of seven, children have ceased to be spontaneous, and are in the process of becoming thinking boys and girls. Although Jameson does not make use of Lowenfeld's stages of development, he discusses the stages through which children pass, and has loosely broken these into five: the first stage, before the child experiences formal schooling, the second stage, from five to seven years, (which parallels Lowenfeld's Preschematic Stage), the third stage from seven to eleven years (this includes the schematic stage, and the early years of the stage of dawning realism), the fourth stage from the age of eleven to eighteen, and the fifth and final stage from eighteen years and older. Jameson does not use the child's artwork as a guide to his stages, but rather adheres to the kind of art education that is offered during each stage.

Gaelene Rowe (1987: 4) introduces her own developmental stages for children, and once again these seem to concur with Lowenfeld's own descriptions. Her Scribbling Stage, also broken into Disorganised, Controlled and Named Scribbling, is followed by the Primary Stage, where the children see themselves as the most important figure. She stresses the value of personal experience. This Primary Stage links closely with Lowenfeld's Preschematic Stage, and Rowe's third stage, the Intermediate Stage (1987:7) aligns with Lowenfeld's Schematic Stage. Rowe describes this stage as one in which children begin to interact with their peers. Rowe's final stage is named the Upper Intermediate Stage, which Lowenfeld names the Stage of Dawning Realism. Both educationalists refer to this stage as one in which children become less confident, and in which great attention is paid to detail.

Simone Alter-Muri, (2002: 189) conducted a survey in six Western European countries, which consisted of drawings completed by 156 children. Although not all of the subjects concurred with the stages of Viktor Lowenfeld, Alter-Muri writes "a basis exists for research to determine the present-day, cross-cultural applicability of Lowenfeld's theories of art development with both American and European children." (188) She concludes by stating: "Lowenfeld's developmental stages seemed to have withstood cross-cultural differences, which were in

language, education, ability to create art at home, parental interest in art, and other parental values”

CRITIQUE AND DISCUSSION OF LOWENFELD.

D'Amico (Alter-Muri, 2002, 177) criticised Lowenfeld's Theories of Schematic Development, stating that by placing children into clearly defined stages, they become categorised. However, Lowenfeld has overlapped the exit and entrance point of each stage. He states that not all children follow these stages at the same time, and that the stages should only be used by art educators as a broad guide.

Feldman (1970) writes that Lowenfeld himself knew that children's ages may vary as they pass through the stages, but that he offered them as a guide. He suggests that should there be an unusually large deviation from this norm, then there may be an emotional or cognitive lag in the child.

By defining these stages, Lowenfeld does not seek to limit children, but rather offers the stages as a support to art educators. This has been invaluable in making educators consider the purpose of teaching art, and has resulted in the generally accepted belief that children should be encouraged to make art that expresses their own experiences of their worlds, rather than to accept the experiences of adults. Children are provided with the tools and techniques and the theoretical knowledge that

best contributes to their effective expression of their own worlds. When they draw in lines, they are encouraged to think about the kinds of lines that would best describe what they are drawing. When they work in colour, they are taught how to mix colour, and to explore it in its variety of tone and hue to best arrive at an expressive and broad interpretation of their worlds.

Children are not encouraged to make art for the sake of a product, because it is in the *process* of making the work that the child most expresses his or her concept of the world at any given time. Child art, if taught bearing Lowenfeld's stages of schematic development as a guide, is an expressive and personal interpretation of the child's current experience of the world, and has very little to do with the art-making that is practised by adults.

I have found these descriptions of the stages invaluable in the training of art teachers, as do many art educators. At The Cape Town Teachers' College in Mowbray, the Further Diploma in Art Education was the only specialist primary school art diploma offered in South Africa before the advent of the Outcomes Based Education Curriculum. Art educationalists Stanley Cohen, Van Zyl la Grange and Eiske Maxwell used the theories of Lowenfeld to underpin their teaching. Students can be encouraged to understand the broad capabilities and perceptions of children in a

particular stage, and can plan art lessons accordingly. The students themselves also understand what they can and cannot expect from children. To set up a complicated still life for a child who is still exploring the development of a schema is a pointless exercise, as the child will simply respond by drawing flowers and fruit as he or she has *experienced* them, and not as they are currently observed. Lowenfeld states that children draw from their experiences of the world, and a child who is in the Schematic Stage draws symbols for his or her experiences, and not visual records.

Alter- Muri (2002) writes that Lowenfeld has also been criticised for not taking into account the cultural differences between children. Lowenfeld states, supported by Rhoda Kellogg, (1970) that it would appear that no cultural differences influence the developmental stages. It would appear that Lowenfeld could find no cultural differences in the children with whom he worked, and not that he paid no attention to them. It may also be possible that Lowenfeld's exposure to children of different cultures was limited, although he did work with African-American adults. An opportunity exists in South Africa to explore the influence of culture on the drawings of children.

Alter-Muri (2002) comments on the fact that a weakness in the work of Lowenfeld is his lack of reference and details regarding his research. She

states that the only reference to actual drawings seemed to be those collected from Lowenfeld's son, who was in the Scribbling Stage at the time. However, Lowenfeld's book, *Creative and Mental Growth*, contains many examples of drawings from children in all of the stages, and the stage of development is clearly established in each drawing.

Although Lowenfeld may not have referenced his research, it does not necessarily render the research invalid. In my experience, the children with whom I have worked over the past number of years seem roughly to follow the Creative Stages of Development as Lowenfeld has described them, and the exceptions appear to be in the minority. It would appear that Lowenfeld must have conducted extensive research to be able to so clearly describe the stages, and their progression.

Barkan (Alter-Muri, 2002, 176) criticised Lowenfeld's research because he did not consider the social influences on the development of children's art. In my experience, I have found that children who come from privileged socio-economic backgrounds may well have enriched schemas, but the basic elements remain the same as children who belong to more deprived socio-economic groups. Lowenfeld suggests that children's drawings are a direct reflection of their experiences of their worlds, so that a child who has a deep and stimulated experience may well have an enriched schema, but will still be in the same developmental stage as a child from a more deprived background. Lowenfeld did not suggest that children from

one culture or social influence may advance to the next developmental stage more quickly than children from another.

Kaufman (1966) warned that Lowenfeld's methodologies of placing deeper importance on the process rather than on the product relied on appropriately trained teachers. Those educators who were not skilled in the didactics of art teaching to children in the primary school were in danger of making use of a methodology without understanding the value of art teaching. Almost forty years later, this problem persists, and scant value is placed on the appropriate training of visual art teachers for the primary school. Frequently, generalist class teachers are expected to teach this subject as part of their weekly teaching load, and the result is a noisy, disorganised art room where opportunities for deepening the awarenesses and experiences of the children are lost.

This attitude to art teaching is further stressed by Rowsell (1987: 38) who describes art as the 'Cinderella subject' in schools. He says that in subjects like mathematics, primary school teachers are expected to provide a thorough basis for later learning in the high school, whereas in non-formal subjects like art, there is no such expectation.

Kindler and Darras and Wolf and Perry (Alter-Muri, 2002, 177) claimed that children "*were capable of constructing and using a range of visual*

images within the time frame of a single stage, depending on the context and purpose of their art." Lowenfeld has analysed spontaneous drawings that children have made without any adult interference, guidance or direction. The words "depending on the context and purpose of their art" suggest that the work discussed by Kindler and Darras and Wolf and Perry may have been completed under teacher direction. When children draw spontaneously, there is no purpose other than the making of a drawing, and no context other than the paper, the drawing implement, and the absorption of the child. It is possible, for example, to encourage children in the Schematic Stage to make a tonal drawing, but when that same child makes a follow-up spontaneous drawing, the tone will no longer be evident. Teachers can direct a drawing process with such interference that a child will produce a drawing that is not stage-appropriate. It is possible to encourage a child to draw in a manner that suggests a more advanced stage, although the child will have no understanding of what he or she is doing, and will revert to his or her personal schema the next time a spontaneous drawing is made.

For nineteen years, I taught children in primary schools in South Africa, using Lowenfeld's definitions as a guide to lesson planning, and although there were often exceptions that occurred because of artistic talent, a greater intellectual capacity, or entrenched adult interference, it appeared

that Lowenfeld's theories were still largely applicable to the children who were being taught, and served as a positive guide for lesson planning.

Based on Lowenfeld's belief that children make their drawings as a direct result of their experience of their worlds, I came to understand that teaching art to primary school children is much more about enriching this experience than about teaching elements and theories. It is about saying to a child in the Schematic Stage, where a recipe and an inflexible schema has arrived: "ride your bicycle, and be aware of the wind in your hair, the joy of the freedom, the muscles in your legs, the tightness of your hands, the actions of your knees, the delight on your face, the way your fingers grip the handlebars, the way your backside sits on the saddle, the way you feel when you reach the top of a long hill." When children remember or imagine all of these things, they will make drawings that extend their schemas, rather than deny them.

In Lowenfeld's theory of the schematic stages of development, I have found an explanation for the reasons for teaching child art that goes beyond the product or result. Lowenfeld has carefully plotted the possibilities that are offered by each stage, and has made suggestions about enriching the child's experience of his or her own world. This gives us as educators an opportunity to make the learning real and deep, because it is stage-appropriate and relevant. We are able to offer children

an enriched experience, a deeper awareness, and an opportunity to portray all of this in a concrete way, without having to resort to the limitations of a spoken vocabulary.

Almost sixty years after the first publication of '*Creative and Mental Growth*' however, an important question arises for trainers of primary school visual art teachers. Today, small children are exposed to a variety of influences that were not as prevalent fifty-six years ago, or that did not exist. Some of the following factors may influence or affect schematic development:

- The break-down of the family unit may lead to emotional stresses which could inhibit the schematic development;
- Untrained facilitators of art experiences may interfere with the schematic development of children by 'showing' them how to draw, or by encouraging them to draw in 'the right way';
- Technological advances have become an integral part of the development of children in the twenty-first century. Television and the computer have become significant tools that even very young children use to experience and explore their worlds. This was not the case in South Africa fifty-six years ago, when Lowenfeld published his findings;
- The Revised National Curriculum, which is currently being introduced into schools in South Africa, is skills-based, and untrained arts

educators are delivering lessons that no longer require the learning process to be recognised as one of the utmost importance in the developing mind of the child.

Trainers of art teachers, and art teachers themselves, therefore need to explore the accuracy and the relevance of these stages for children who are entering the twenty-first century. If the art-making of children is based on their experience of the world, then, as the experiences of children change, the art-making should change accordingly.

As a trainer of primary school art teachers for the Foundation, Intermediate and Senior Phases, my colleagues and I base much of our teaching on these schematic stages of development. If the schematic development of children has changed, it will be necessary to determine whether the stages are accelerated or retarded, and the impact this might have on teacher-training. It is important that the teachers whom I train take with them the relevance and opportunity for a deep learning experience, so that the children of this new millennium are offered the same meaningful, expressive art-making that Lowenfeld himself advocated.

THE RESEARCH DESIGN AND METHODS

This study examines the drawings of children with a view to discovering whether there is a *general* similarity to the ages and stages as described by Viktor Lowenfeld, and whether my current methods of training are still relevant.

I am attempting to draw direct similarities between the stages plotted by Lowenfeld, and the sample drawings gathered. I shall not attempt to re-name, re-plot, or re-invent any stages that may be found. I shall not touch on or explore any cultural differences, and it has clearly been stated by Macdonald, Kellog and Lowenfeld that no cultural difference has significantly been noted in previous studies.

Four primary schools in the Southern Suburbs of Cape Town agreed to participate in the study, although I agreed not to name them. These middle-class Western Cape Education Department schools have populations who are predominantly white and coloured, although each one of them has a small number of black learners. All of the schools are co-educational, and each has a curriculum where art is taught by qualified art teachers for one hour a week.

Teachers were asked to invite children to make spontaneous, undirected drawings of their families. Common subject matter was essential in order to compare typical features. They were asked to give the children pencils or fibre tipped markers, to ensure maximum freedom of detail, with no interference from colour media. The shapes and images of the representations were more important than the child's understanding of colour.

Teachers were asked not to suggest alternative approaches or solutions to the children, so that the drawings reflected their spontaneous developmental stage, and not what they are able to accomplish under instruction. I provided paper of the same size for each participating child.

The drawings were all completed in the same week, so that children were all in the same stage of their school year. By doing this, I was trying to avoid the fact that a child in grade one who is six at the beginning of the year will produce a drawing that is markedly different from a child who is in grade one who is six at the end of the same year. I believed that it was important to compare drawings made by children who had all had the same or similar academic input at the time that the drawings were made.

Teachers were asked to include on the drawings only the ages of the children. Names or gender were not requested. I addressed the staffs at

each institution, making clear the purpose of my research so that the teachers would not seek to impress with 'good' results.

Once the drawings were collected, I proceeded to analyse them, using the Lowenfeld criteria for each stage as a guideline.

It may be possible that despite technology, and despite all of the other influences on the first generation of learners of the twenty-first century, children may yet adhere to the developmental stages as plotted by Lowenfeld. Both Kellog (1970) and Lowenfeld claim that all children, no matter what their social or cultural environments may be, pass through the same stages, in the same order, at roughly the same age. If this is indeed true, then it appears that external influences have little effect on the creative development of children. This will possibly result in the schematic stages remaining constant, despite the changes in the child's outer world.

CHAPTER TWO

DESCRIBING THE STAGES

It is necessary to describe the stages of development as defined Viktor Lowenfeld so that they can be used as a control against the spontaneous drawings of children gathered from four schools in the Peninsula.

Since 1947, when Lowenfeld first published *Creative and Mental Growth*, the descriptors for each stage of development have not changed. There have, however, been sweeping changes in the world since that time. Technology has revolutionised the way in which children live their experiences, and cultural changes have brought their influences into the lives of children. In South Africa, changes to the school curriculum and the school-going age have influenced the way in which children learn.

The descriptors that Lowenfeld listed in 1947 are being applied to children who are living and learning in a world that has changed beyond recognition. In South Africa, a cultural melting pot is currently occurring in primary schools, and this is bound to have a profound effect on the experiences of children. If the drawings of children are indeed the manifestation of their response to their worlds, as Lowenfeld suggests, then the drawings of these learners will reflect the diversity of their worlds

in a way that no educator working in the middle of the twentieth century could have predicted.

THE SCRIBBLING STAGE (2 to 4 years)

This stage is further divided into Disordered Scribbles, Controlled Scribbles, and Named Scribbles.

Although we usually think of art as starting with the first mark that a child puts down on paper, it actually begins much earlier when the senses first contact the environment and the child reacts to these sensory experiences. Touching, feeling, seeing, manipulating, tasting, listening, in fact any method of perceiving and reacting to the environment is essentially background for the production of art forms, whether it is on the child's level or on that of a professional artist. (Lowenfeld, 1970, 89)

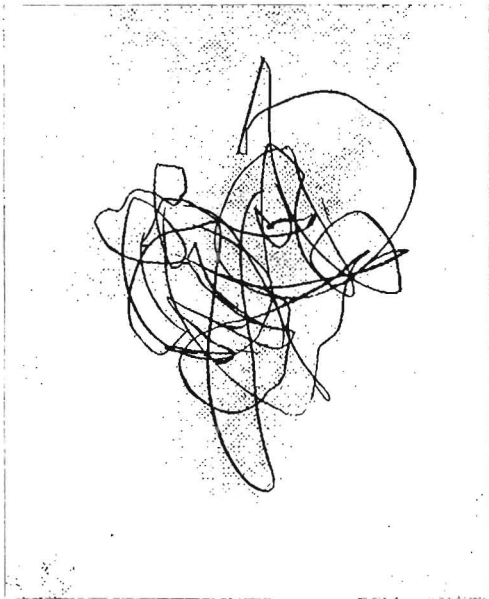
CHARACTERISTICS OF THE SCRIBBLING STAGE.

The Scribbling Stage begins with disordered scribbles, and in an order that can be prescribed, continues through to a time when the scribbles become more controlled, and later are even named.

DISORDERED SCRIBBLING

The first marks are usually random, and the child does not seem to realise that he can make these do what he wants." (Lowenfeld, 1970, 91)

Children have not yet reached a stage where the drawing implement is held in any particular way, and so they may employ a variety of methods to hold the tool, and to make marks. Results are accidental, and the lack



of control brings about a wide variety of line quality. Children make marks with large movements, and may frequently look away from their drawings. Although at this stage, children have no visual control over the scribbles that they are making, they may be able to copy a line, but will not be able to copy a circle.

example of disordered scribble – page 92, *Creative and Mental Growth*.

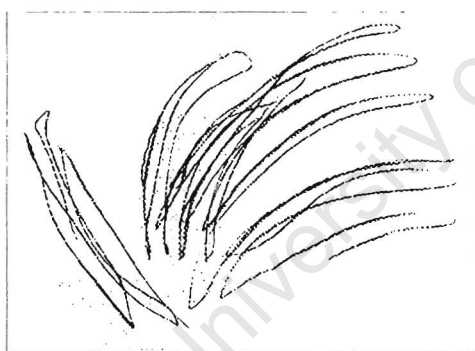
CONTROLLED SCRIBBLING

At some time a child will discover that there is a connection between his motions and the marks on the paper.” (Lowenfeld, 1970, 93)

When children discover that there is a connection between the movements that they are making, and the marks that appear on the paper, the controlled scribble results, and they begin to exercise visual control over these marks. As children learn to exercise control over their movements, they vary the motions and the marks. Greater enthusiasm results in lines that are drawn vigorously, and may be vertical or horizontal. Some circular motions may be included, although, as the child does not yet lift the drawing implement from the page, no small dots are

found. There may be an interest in colour, although local colour is not yet applied. The entire surface of the page is often covered with drawing.

By the age of three, children have usually arrived at an adult grip of the drawing implement, and are able to copy a circle but not a square. Children are not able to draw what they see. It is the act of drawing that is important, rather than the appearance of the final drawing. Anne Hill, the Head of Department in the General Education and Training Phase at the Cape Technikon, collected the drawings made by her son as he progressed through this stage. On one occasion, she asked him what he had drawn, and he answered: "I don't know what it is. I only know how to



draw it." This is an example of a child absorbed in and fascinated by the marks that he is making, rather than in the subject matter or the topic of *what* he is drawing.

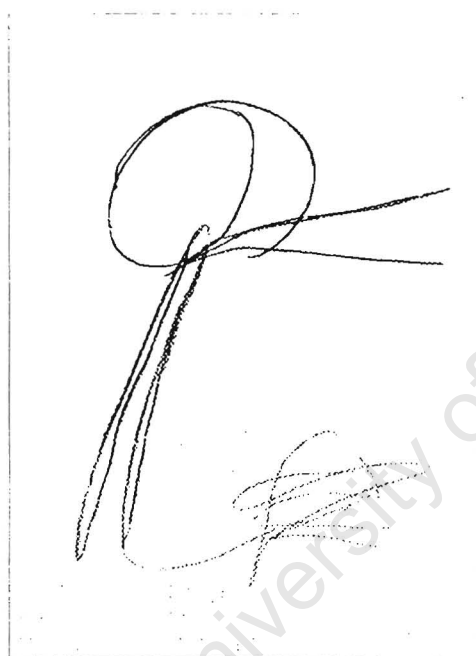
Example of controlled scribbles, page 94, *Creative and Mental Growth*.

NAMED SCRIBBLING

This is the point where the child starts to name his scribbles. He may say 'This is mother', or, 'I am running', although neither mother nor himself may be recognised. This naming of scribbling is of great significance, for now the child's thinking has changed. (Lowenfeld, 1970)

When children begin to name the marks they are making, it means that they are beginning to make connections between the motions of their drawing and the images on the page, and that these further connect to the world around them. They begin to make and name images with intent.

The circle forms the basis for most images that are drawn. There is still great enjoyment in the actual movement of making a drawing, and the



marks will be distributed over the entire surface of the paper. The discussion about the drawings will often seem as though children are telling stories about the marks that appear, or may even seem to be talking to themselves. This monologue is often a reflection of the way children feel about themselves in their current contexts.

"Mother goes shopping"
Example of a named scribble, page 97, *Creative and Mental Growth*.

Line and form become more important, and colour has little value. The emotional content of the scribbles is the significant part of these marks. Adults often hinder the process by insisting on naming the scribbles, or by giving them their own interpretations.

A child who is still scribbling in the first grade will not be ready to read or write, and no amount of encouragement will make this possible.

Since scribbling is a reflection of the child's total development, we have here an indication of the child's intellectual growth, particularly at a time when the usual group-type intelligence tests are not usable. Therefore a kindergarten child who is still in the scribbling stage will not be able to perform at the level usually expected of kindergarten children. (Lowenfeld, 1970, 106)

In my experience as an art educator, the comments that children make as they draw often give us an indication of their worlds as they are experiencing them. A scribble will suddenly become a line across the top of a page, and the child will talk about "the bird flying far away". Jagged lines may appear energetic and expressive to an adult observer, but the small child may describe them as "the dog sleeping in his bed".

Once children begin to make recognisable images, they seem to stop talking, or naming their drawings, as much as they did when they were still scribbling. It is almost as if the image begins to talk for itself, and the child no longer has to do the describing. Their interest seems to shift into making shapes that fit together to tell the story of the drawing for themselves. When I asked children who were in the scribbling stage to tell me about their drawings, they would do it with great assurance. The following day, when asked about the same drawing, they sometimes did

not know what they had drawn, could not make any comment, or made up an entirely different story. Once an image that was recognisable appeared, the enthusiastic storytelling seemed to retreat a little, and the stories remained the same, even when the child was asked to talk about the drawing some days later.

University of Cape Town

THE PRESCHEMATIC STAGE: 4 - 7 YEARS

This stage heralds the beginning of real communication through mark-making, as children make representational recognisable forms for the first time. It is during this stage that children enter formal schooling, and formal art education is presented as a separate activity. For this reason, I will begin this research with drawings made during the Preschematic Stage, or the age of the onset of formal schooling only. My earliest samples will be drawn from children in grade 1.

CHARACTERISTICS OF THE PRESCHEMATIC STAGE.

Developing the circles that ended the Scribbling Stage, children intentionally make the first representational form, and by the age of four, fairly recognisable images are beginning to appear in children's drawings. Almost without exception, the first recognisable image created by children is that of a human being. The circle is used for the head, with vertical lines extending from the head to become legs. Lowenfeld suggests that children may even be making attempts at representing themselves. As the world is experienced through the five senses, and as the sense organs for four of these are located on the head, the head is generally drawn in more detail than the rest of the body.

At any rate, the first representational attempts at a man should not be looked upon as immature representation, for it is fairly obvious that a drawing is essentially an abstraction or schema from a large array of complex stimuli and is the

beginning of an ordered thought process. (Lowenfeld, 1970, 121)

During this development, the representation of the head to feet becomes more detailed, and arms are gradually added to the drawing. As the child's experience deepens, toes and fingers are added, and finally the body becomes part of the whole. By the age of six, a fairly easily recognisable image of the human form is achieved.

Example of a preschematic representation of a human form, pg 119, *Creative and Mental Growth*

During the Preschematic Stage, children are still exploring new understandings and experiences in their environments, and this flexibility is evident in their drawings.

By the age of seven, children will generally have established personal schemata, and an object, drawn



according to their personal recipes, will be repeated over and over again. During this stage, frequent changes in the drawings and symbols that are used indicate the frequent changes that are also occurring in the thinking processes. The Preschematic Stage is a time of great flexibility. New

experiences continue to change children's perceptions of the world, and influence the images that they use in their drawings.



'Walking on the Grass after Rain', pg 129, *Creative and Mental Growth*

An emotional involvement, or a recent experience, will result in an exaggeration of some thing, or some parts of the body. This drawing, by a five year old boy, shows exaggerated feet responding to the topic 'Walking in the grass after rain'.

By the age of five, children should generally be making some attempts at representational drawing. The more elaborate these are, and the more

details that are included, the more highly developed are the children's intellectual processes and their experiences of the world.

When I was teaching art to children of this age, it was fascinating to watch the changes that occurred in their drawings as the experiences of the children deepened. If we spoke about stroking a large cat, the fingers of the image would be drawn in great detail. If we spoke about eating pizza, the teeth would be enlarged and prominent. Flexibility was very evident during this stage, and with each experience, the children's drawings would change. These were teacher-directed drawings that encouraged children to be aware of certain sharpened experiences during their art lessons, and as my role was to intensify and deepen their experiences and their art-making, I did not have the opportunity to invite spontaneous drawing from my young charges. However, even in teacher-directed drawings, the children demonstrated an experiential experimentation in their mark-making. Geometric shapes were the basis for their drawings, while they explored different ways of portraying their current experiences of their worlds. On one day, they would make figures with large hands, which touched, held, felt or made, as the topic of the work demanded. On another, they paid no attention at all to the manner in which they drew the hands, because it was the faces that were important at that time, and were drawn in more detail.

THE SCHEMATIC STAGE: 7 – 9 years.

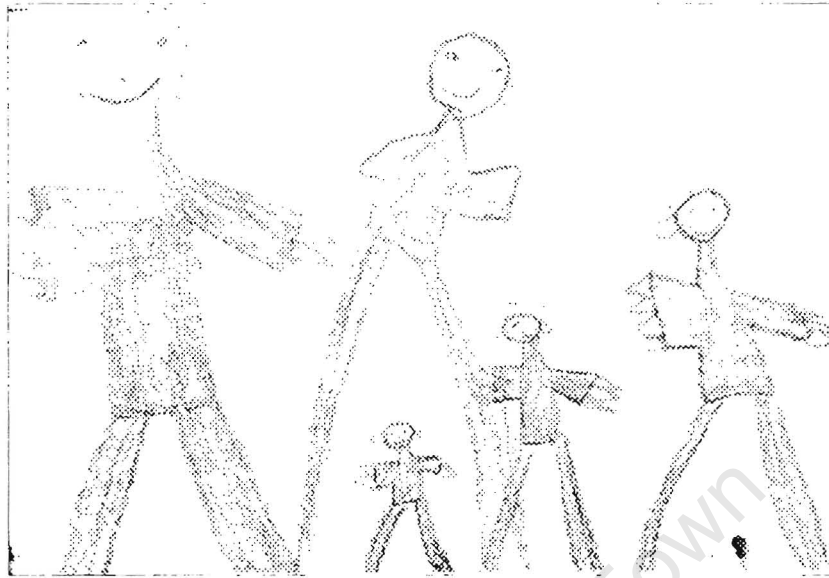
After the exploration and experimentation of the Preschematic Stage, the child slowly arrives at a definite concept of the human being, and of the environment.

Although any drawing could be called a *schema*, or symbol, of a real object, here we refer to schema as the concept at which a child has arrived and which he repeats again and again whenever no intentional experience influences him to change this concept." (Lowenfeld, 1970, 145)

Children produce unique and individual schemata, as these are the direct consequences of their personal relationships with the world. Some children have an enriched schemata, whilst others will produce one that is fairly meagre.

CHARACTERISTICS OF THE SCHEMATIC STAGE.

Most children have arrived at their personal schema by the age of seven. These drawings are often more rigid than Preschematic drawings, as images are sometimes repeated over and over again. Details will be added and the schema will be developed, but the basic parts will remain constant. In the drawing below, we see that this seven year old has the same schema for hands, hair and bodies.



Drawing by a seven year old, pg 149, *Creative and Mental Growth*.

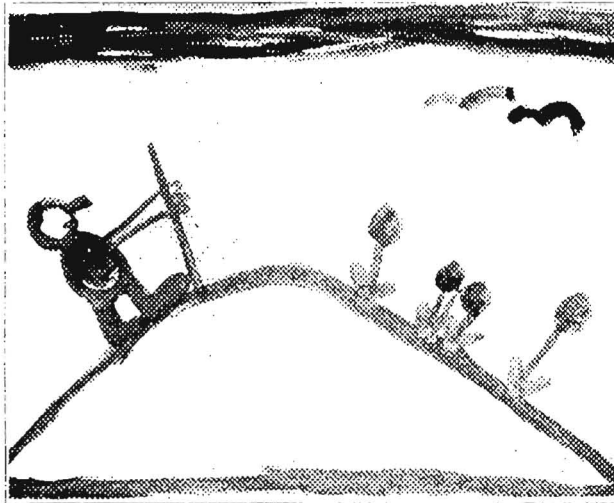
By the age of seven, a recognisable human being should consist of clear body parts, and the features of the head should be easily recognisable. Sometimes even a neck is evident. Some children's first schema is the profile schema or side view.

The drawings of the human being in the Schematic Stage consist almost entirely of geometric forms, which lose their meaning when they are separated from the whole schema.

The base line is a line added at the bottom of the paper, and is evidence of children's first conscious awareness that they are part of an environment, along with other people and objects. The universal base line is as much an indication of children's development as their abilities to

learn to run or skip. It indicates that children are ready to see themselves as parts of their environments, and no longer as the centres of the

universe.



Sometimes the base line is omitted, and a skyline replaces it, but often both are included in a drawing, as may be seen in this example.

Drawing by seven year old with strong base line and skyline, pg 151, *Creative and Mental Growth*.

In some cases, when the experiences that children are portraying in their drawings have been particularly significant or very strong, the base line will not be added. This is often the case when children lose the feeling of being connected to the ground, as in riding on a see saw, swinging, or being thrown into the air by a strong adult.

It is usual that only two dimensions are represented in drawings made during the Schematic Stage. Sometimes children include a mixture of plan and elevation in their drawings, and will draw a table from the side, but a game board from the top, so that all parts are evident.

During the Schematic Stage, a difference begins to emerge in the spontaneously drawn subjects of boys and girls. Boys appear to favour mechanical objects, whereas girls prefer human beings and animals.

Abstract thinking is based entirely upon symbols, and during this stage we see the child's first step towards this development." (Lowenfeld, 1970, 187)

Children use the same symbols to represent objects. For example, girl's dresses will all be represented by triangles, and boys' trousers will all be represented by two rectangles.

The drawings on the following page were made by four seven year old children in my own art class. Some years ago, I wanted to test Lowenfeld's theory, and handed paper to these children without giving them any further directed instruction about the way in which I wanted them to explore their subject matter. I asked them simply to draw their families. I include these drawings because they are South African examples of the Schematic Stage of Development, and because I use them every year with my students, to demonstrate what the Schematic Stage actually means.

Although the drawings are very different from each other, their context as Schematic drawings is very similar. Each child has used a personal

'recipe', and has used repeated images for hands, heads, and facial features, as well as for feet, and in some cases, even clothing.



Drawings completed by four seven-year-old children at the Frank Joubert Art Centre.

These drawings demonstrate that socio-economic influences may be very different, and children may experience their worlds in differing degrees of stimulation, but they still exhibit very typical symptoms of being in the Schematic Stage. Some of these children have enriched schemas, and include more detail, but those details are included as enriched recipes, or schema.

An interesting aspect of teaching children in this stage is that their flexibility appeared to disappear. Their experiences could be enriched by teacher-input, but it made very little difference to the way in which they portrayed the human form. They would accept the offered subject matter with enthusiasm, but their schema remained intact throughout the drawing experience. Even with a deepened stimulation or actual experiences that were brought into the art room, the children used their schema to portray what they were experiencing.

University of Cape Town

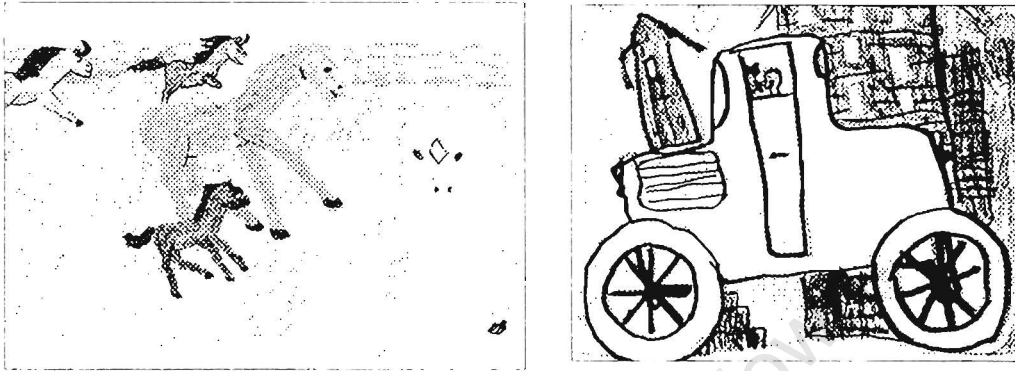
THE STAGE OF DAWNING REALISM: 9 - 12 YEARS

This stage develops with the growing awareness in children that they are part of a group, and is thus often called the gang age. Children of this age begin to encounter the real world, one of strange emotions, of experience that is not always pleasant, and of a difference from adults.

CHARACTERISTICS OF THE STAGE OF DAWNING REALISM

Schematic drawings are no longer enough to represent the human figure for children entering the Stage of Dawning Realism. The generalisations of the human form are not adequate for children who are becoming aware of sexual differences or developing a deeper social awareness. They begin to abandon the geometric forms of the Schematic Stage in favour of forms derived from nature. This does not mean that drawings become more realistic. The child becomes more aware of finer detail, but loses the sense of action and movement. A greater rigidity begins to appear in the drawings. Whereas during the Schematic Stage children tend to exaggerate the body parts that were emotionally significant to them, during this stage they fill them up with details. This concern for detail can sometimes take over the drawing, so that the finished product may tend to look distorted. There is still no attempt to show tone, wrinkles, folds or other visually accurate representations.

Girls in the Stage of Dawning Realism frequently draw horses, and boys identify more with cars. The drawings below, one made by a girl, and one by a boy, show this inclination and preference.

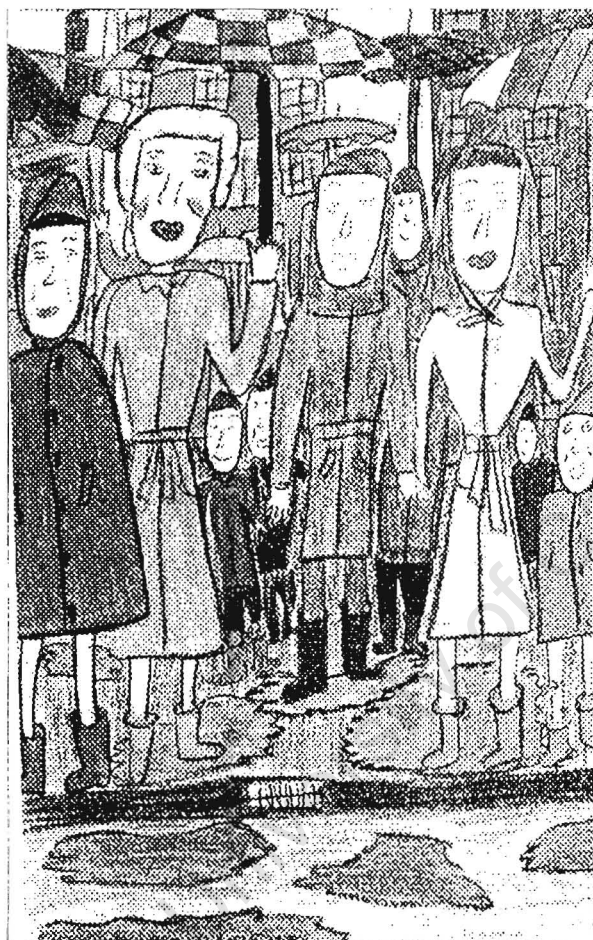


The drawing on the left is drawn by a girl, and on the right by a boy. Pg 194, *Creative and Mental Growth*.

Space is portrayed more naturalistically, and there is a change from the single base line to the plane. The skyline also disappears, and the horizon becomes more significant. Overlapping becomes possible as the child becomes aware of the significant relationships of shapes in space, and moves closer to a more naturalistic representation. Children in earlier stages do not have the understanding of spatial relationships that is necessary to create one shape behind or in front of another.

Children begin to question, and become critical of themselves and of others. This is the first time that a child will self-consciously hide a drawing from an adult. Some concepts that children develop during this stage stay with them throughout their adult life. This is also true of their drawings, and

if no further training occurs, these children will carry their modes of drawing with them into adulthood.



'Standing in the rain.' Drawn by an eleven year old girl, pg 210, *Creative and Mental Growth*.

The ability to break away from the schema and include individual differences and details is an important aspect of this stage. In some cases, the schema for facial features may remain, whilst the body is drawn more individually. The body parts are no longer geometric, and can withstand being removed from the whole. A foot will remain a foot, even if it is cut away from the rest of the drawing.

When I was teaching art to children of this age, I found them to be very insecure about their own art-making, and often reluctant to allow other adults to see their renderings. They appeared to enjoy lessons where

design elements were introduced, and related well to craft and design projects. These required skills that were not based on a drawing schema, and the children were able to work for an extended period on projects that inspired them. This, according to Lowenfeld, is because the children in this stage are aware that their drawings are not naturalistic, but they have an awareness of realism and its influence on art-making.

Their critical awareness affected their attitudes to their work, and they seemed to lose the enthusiasm about art-making that is so evident in younger children. It appeared more successful to bring life drawing into the art room, rather than to expect these children to draw from memory. They were able to learn about the human form through observing a model, but when they were asked to draw from memory, they would revert to their schema, and then become extremely dissatisfied with their drawings.

This was the first time that I ever encountered young people who confessed "I can't do art". Younger children would happily make drawing a leisure pastime, but children in the stage of Dawning Realism seemed to move away from this activity. They were, however, easily inspired by the 'safety' of craft projects, and would often develop these in their spare time.

It is interesting to acknowledge that in South Africa, the curriculum that has been in place until the introduction of Curriculum 2001 included art as

a compulsory subject up to grade 7, and thereafter, children were able to make a choice about the subjects that they would study at school. Children were officially able to stop making art at the age of twelve or thirteen, the very age that heralds the end of the Stage of Dawning Realism.

The Revised National Curriculum that is currently being introduced, includes visual art as one of the compulsory disciplines in the learning area Arts and Culture up to and including grade 9, when the ages of children may range from fourteen to sixteen. As yet we do not know how effective it will prove to be, nor what the response will be from the learners. It should perhaps be stated that the policy document requires a different kind of art-making from learners, and one in which appropriate teacher training is of fundamental importance.

CHAPTER 3

ANALYSING THE SAMPLES.

In order to test the developmental stages of these children, I extracted the descriptors from the Lowenfeld text, and applied them to the drawings.

THE PRESCHMATIC STAGE

As formal art education begins in grade one, it is here that my interest begins. Children in grade one are generally six or seven years old. According to Lowenfeld, six year-old children are still in the Preschematic Stage of Development, and it is at seven that they begin to enter the Schematic Stage.

I have therefore taken the six-year-old sample, and tested it against the descriptors for the Schematic Stage to establish whether these children are still in the Preschematic Stage, or whether any of them have moved on to the Schematic Stage.

The Six-Year-Old Sample.



A8

This is a typical example of a Preschematic drawing, and is discussed in further detail on page 58.

This sample of drawings was tested against the descriptors for the Schematic Stage of Development. The results, as shown on the graph that follows, prove conclusively that there are very few typical Preschematic drawings in this sample. The greater number of these children has already entered the Schematic Stage.

Number of drawings in sample: 12	80% 12/15 drawings	66% 10/15 drawings	80% 12/15 drawings	80% 12/15 drawings	60% 9/15 drawings	73% 11/15 drawings
	repetition of schema	more rigid than preschema	images repeated	constant schema of basic parts	geometric shapes	base line, skyline, or environ

Graph showing percentages of adherence by six-year-old children to descriptors for the Schematic Stage.

The most important aspects of the Schematic stage are that there is a **constant repetition of schema, some images are repeated over and over again, the schema of basic parts remains constant, and that the human form consists almost entirely of geometric shapes. The inclusion of a base line, skyline or other environmental features is also emphasised.**

It is these aspects that I shall examine more deeply in the following analysis.

1a. Exceptions to the Preschematic *Constant Repetition of Schema*:

Although adhering to the description of the Preschematic Stage, instead of being the general rule, drawing A8, shown on page 56, is a clear

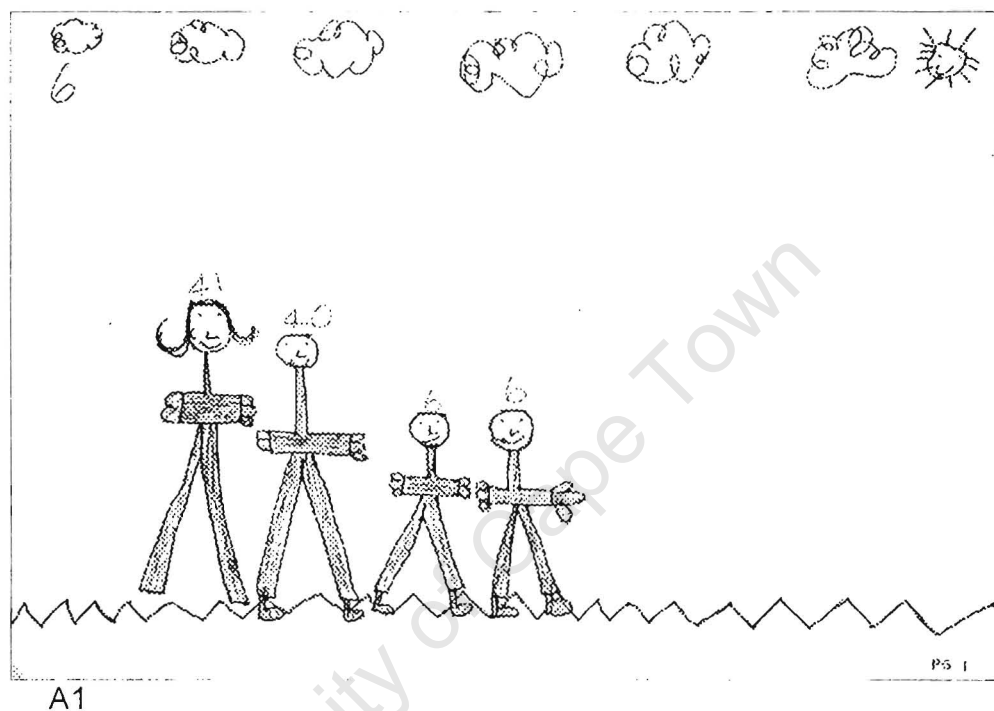
exception in this sample. The figures may show a certain similarity, and one can see the schema beginning to develop, but there is still a great flexibility in the rendering. The figures have not yet become grounded in the environment, and float in space on the page. The child has not reached an understanding of being positioned in the environment. No base line is indicated.

The facial features are still explorative, tentative and different. Some of the figures have ears and some do not, and the hands, which are interpreted in four different ways, have not yet reached a stage where they are all drawn in the same schema. This x-ray drawing shows the bodies within the clothes, as the child still remembers the action and the feeling of the limbs being pushed through garments. There remains an exploration in the rendering of facial features, hands, ears and hairstyles.

1b. Adherence to Schematic Descriptors

Twelve out of fifteen drawings, or 80% of the children from this sample, are already displaying a constant repetition of the schema. Their explorative Preschematic Stage has given way to the constant symbolic use of shape, and a schema is found to represent certain parts of the face and the body of the human form. In drawing A1 this can clearly be seen. Here there is a recognisable schema, albeit very basic. The arms and necks of all of the figures are drawn as one geometric cross shape, which

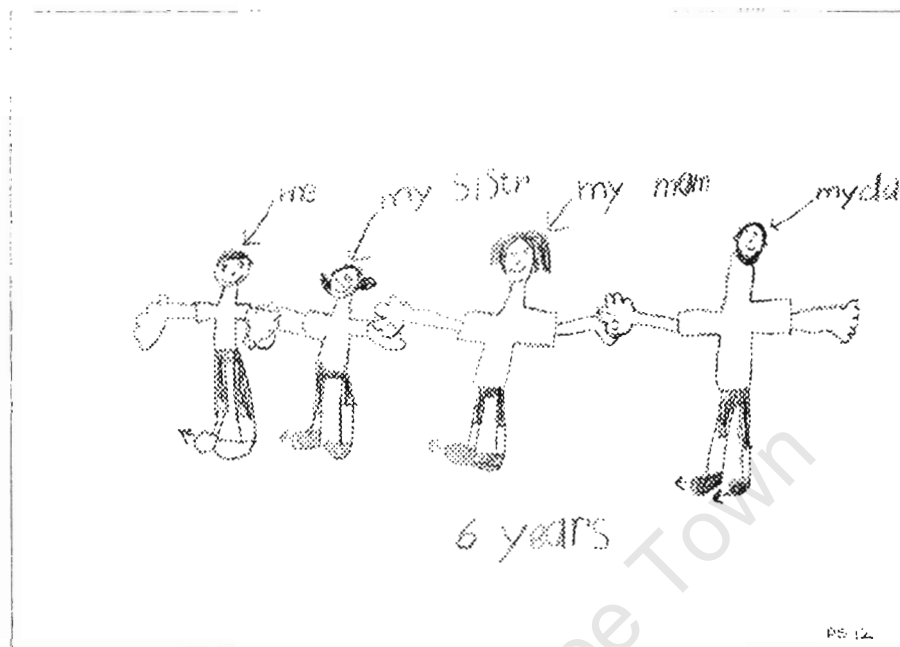
is repeated for each of the figures. All hands are represented as three oval shapes at the ends of the geometric arms, and the triangular legs are inserted below the arms.



All of the feet are drawn in the same way, and face to the right. The heads are circles, and the faces are depicted in the same way.

In drawing A12, shown overleaf, although different shapes are used from A1, we also find a repeated schematic representation.

The heads are circular, the bodies all rigidly in the shapes of crosses, and the legs are rectangular. All feet point left, with arrows indicating that walking is occurring, and the direction in which the figures are walking.



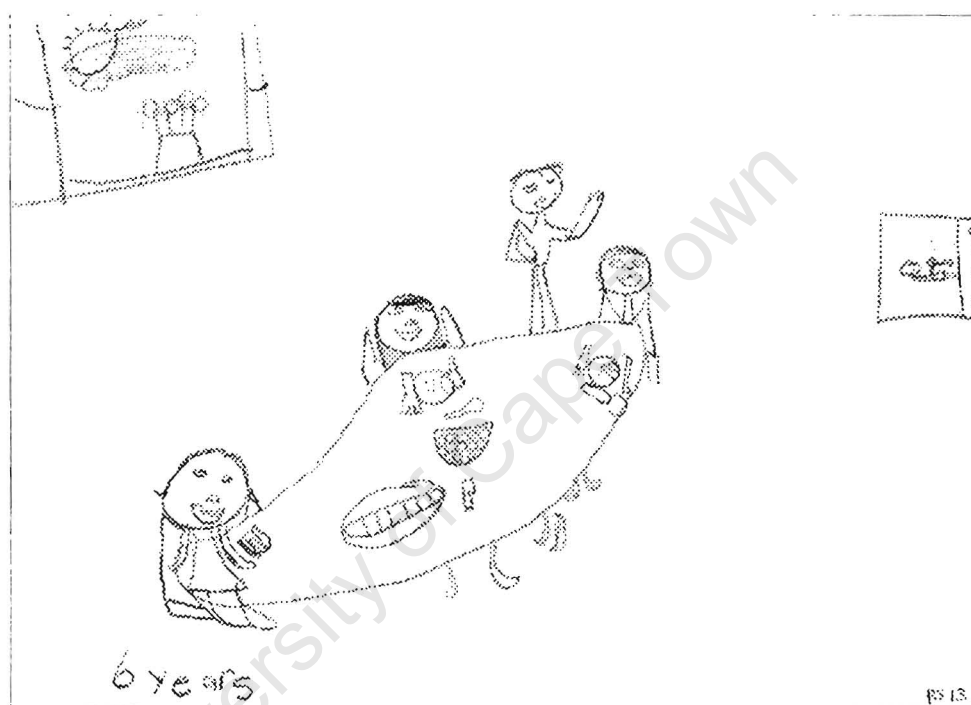
A12

This child does not yet have an ability to draw bent legs or profile views to indicate the action of walking, and so has compromised with the use of arrows. The child has not yet come to understand the process of overlapping, or of hiding one shape behind another. The hands, which are linked, are simply drawn one on top of the other.

2a. Exceptions to the Schematic *Repetition of Some Images*

The examples of typical Preschematic treatment of fluid, explorative facial features feature in only three drawings.

In drawing A13, a typical example of the Preschematic Stage, the figures seated at the table are hidden by the table itself. Facial features do not follow a schematic pattern. Two of the noses are triangular, one is a circle, and one is a dot.



A13

Each body is drawn differently, and the loose shapes at the front of the table could either represent the legs of the table, but are more likely to represent the cut off views of the legs of the human beings who are seated. These shapes occur in pairs.

This is a typical example of the flexibility of the Preschematic Stage. The child draws from experience, rather than from what is seen.

2b. Adherence to Schematic Descriptors

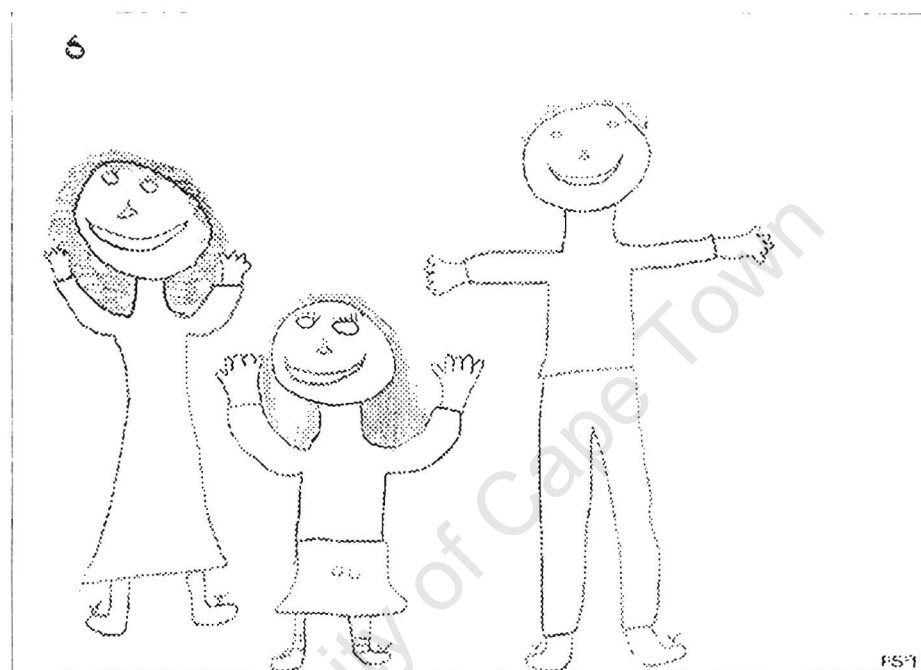
This sample showed a response of 80%. Drawings A1 and A12, shown on pages 59 and 60 respectively, display a repetition of some images. This may also be seen very clearly in A4.



In this drawing, the schema for the eyes has been repeated. All eyes are oval, and each eye has exactly three eyelashes, no more, and no fewer. Noses are dots, and circles indicate the cheeks on each of the figures represented. Adults are tall, and the children are shorter, but the basic shapes remain constant. All feet point to the left, and all shoes have a symbolic bow, represented by an 'm' shape on the top of the foot. Animals included in the drawing are constructed from circles and ovals, and they each have only two legs. The animals also have eyes with three lashes.

The dresses of the children are decorated, while the clothing of the adults remains plain.

In A9, we once again find the repetition of some images.



A9

The females in the drawing raise their hands in semi-circles, whilst the male has arms that extend straight out from the body. All mouths are drawn as open semi-circles, and noses are rendered in the child's unique answer to finding a symbol for this organ. On each figure, the right foot faces right, and the left foot faces left. There is a similar symbol for laces on the top of each shoe.

3a. Exceptions to the Schematic *Constant Schema of Body Parts*

In this sample, only three drawings did not adhere to this Schematic Stage descriptor. These are A8, pictured on page 56, A10 pictured overleaf, and A13, pictured on page 61. In these drawings a flexible body depiction is evident. In drawing A8, (page 56) the child demonstrates flexibility in the rendering of body parts, as the world is explored and experienced. In A13 (page 61) the figures are all rendered differently, and the body parts have not yet settled into a schema.

Although A10 (page 65) does not demonstrate a constant schema for body parts, the drawing is not an example of the Preschematic Stage. This child is beginning to explore the different body postures that are caused by action, movement and environment, and here the figures are involved in a plane, rather than along a base line. This drawing already shows signs of a developing understanding of the spatial concepts of the Stage of Dawning Realism.

There are four figures in the drawing. Although the heads are all drawn in profile, each figure has a different hairstyle. Two of the figures have circles for eyes, and two have dots. The noses and mouths are all drawn in similar schema, but the hands and feet are different.

The older male figure, at the centre left of the figure, is wearing shoes, while the smaller male, bottom centre, is barefoot. Although this child has not reached a stage where overlapping has occurred, the figure seated at the centre right has legs which begin to indicate a bend, with feet that hang down from the chair.



3b. Adherence to Schematic Descriptors

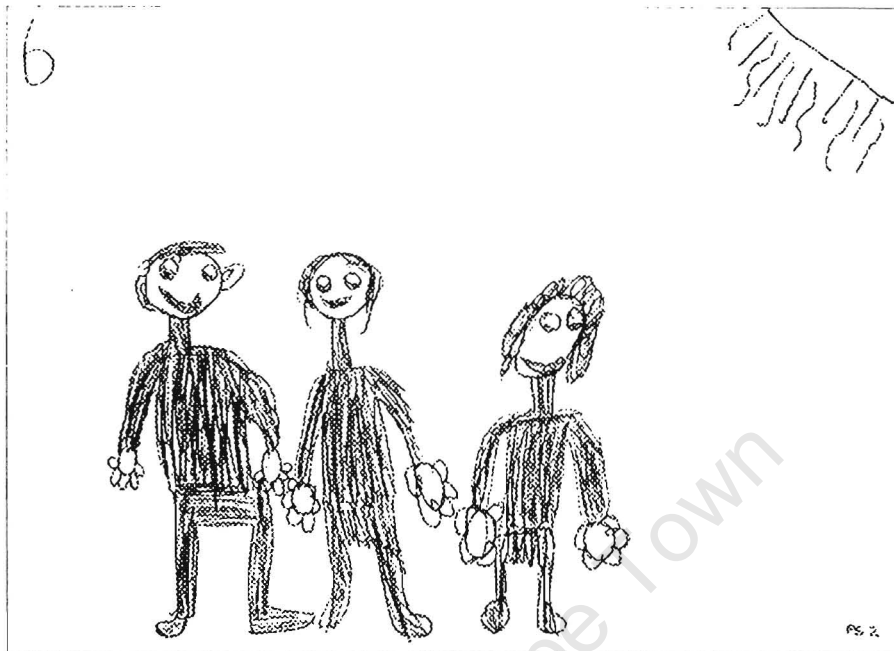
Twelve of the fifteen drawings showed strong constancy of body schema, once again giving us a total of 80%. A very strong example of this is found in drawing A12, on page 60.

4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

One of the features of the Schematic Stage is that the bodies are drawn in geometric parts, which lose their relevance if they are separated from the whole. Many triangles, rectangles and oval shapes are found in drawings completed by children in the Schematic Stage, and the circle remains one of the most significant shapes.

In this sample, which, according to Lowenfeld, should be showing Preschematic tendencies, only six drawings, or 30%, showed bodies that were rendered with organic, flexible shapes. Once again, the drawings that remained Preschematic were A8 (page 56) and A13 (page 61), although in the latter, there is evidence that geometric shapes are beginning to emerge. The heads are fairly well-defined circles, and the body parts are beginning to assume an angularity.

In drawing A2, shown overleaf, although there is some evidence of geometric shapes in the heads, the necks and the hands, the upper torso is fairly naturalistic. The flexibility of the Preschematic Stage is evident in the difference in the rendering of the hair of the three figures, and in the addition of ears to only one of them, although the hands are strictly schematic, with shapes repeated.



A2

There were some drawings which did not display geometric tendencies, but which nonetheless cannot be described as Preschematic. These drawings have already left behind the geometry of the Schematic stage, and the bodies have become more natural and organic. The parts can no longer be separated from the whole.

Drawing A10 (page 65) has already been used as an interesting example of deviations from both the Preschematic and the Schematic Stages, because this child appears to have evolved in many aspects to another understanding. The bodies in this drawing are not constructed of geometric shapes, but have moved closer to a more natural rendering of

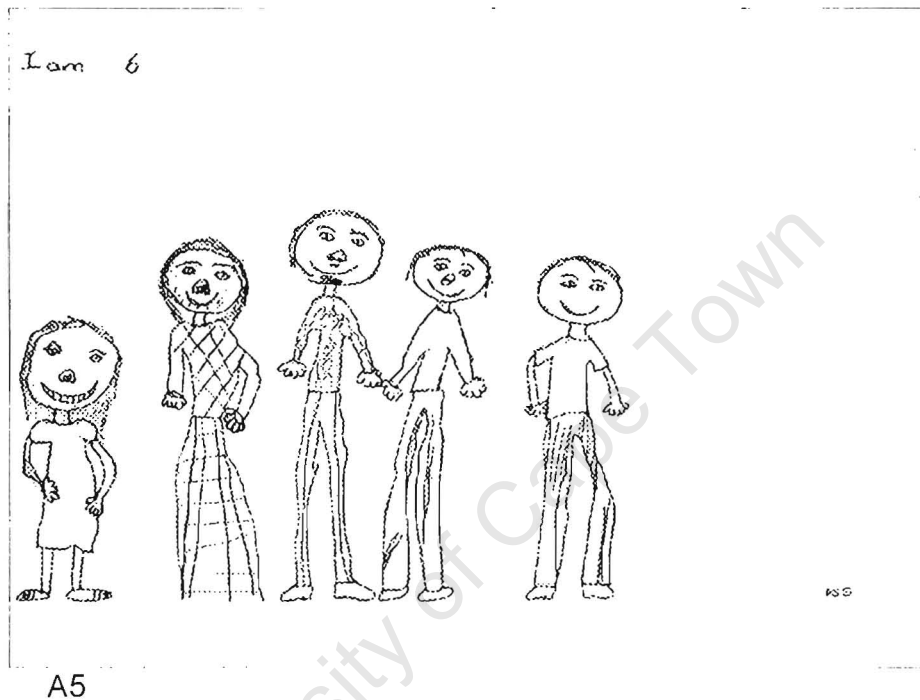
the human form. There is evidence of geometry in the straight, strong lines that have been used, particularly in the figure at left centre, but there is a clear movement away from simple geometric shapes as solutions to the human body.



A7

The shapes that are used in A7 are not geometric. The rounded shoulders lead into whole bodies that are not divided into geometric parts, but rather into body parts. In every other aspect, however, A7 remains a typical Schematic drawing. The shapes are repeated, the schema for body parts is constant, and the figures are firmly placed on a base line.

In drawing A5, there is already a movement towards a more natural rendering of the human form, and although a clear schema is evident, individual differences have begun to appear in the figures.



The shoulders have lost their geometric angularity, and slope in a natural way from the neck. The trousers of the males are rumpled, and an attempt has been made to show the fabric. The noses, although slightly triangular in form, have attempted to show nostrils, and the eyebrows are constructed of small, short lines, indicating that they are made from short hairs. This child's movement towards realism embraces one of the aspects of the Stage of Dawning Realism. There is also more attention paid to detail, and some of the figures have had unique changes added to

them. This drawing cannot be described as Preschematic. Although the bodies are not constructed of geometric shapes, the rendering shows detail and natural forms found in the Stage of Dawning Realism.

4b. Adherence to Schematic Descriptors

In this category, 60% of the drawings demonstrate this strong geometric component. A very good example of this is drawing A6.



A6

Here we find bodies that are clearly constructed from parts made from triangles and rectangles, with sharp points and straight lines. Heads are circles or ovals. It is interesting to note that the human forms contain this geometric element, but the animal, possibly a dog, has more natural curves.

The hands are rendered as circles surrounded by a row of oval shapes for the fingers, and all of the mouths are half moon shapes.

5a. Exceptions to the Schematic *Inclusion of Base Line, Skyline or Environmental Features*

Only four drawings in this sample do not have a strong suggestion of a base line, or include environmental features. Drawing A8, (page 56) does not have any indication of placement for the figures. They are floating in space, a typical aspect of the Preschematic stage. Drawing A12, (page 60) has figures that are not positioned at the base of the page, but are nonetheless drawn in a straight line. This indicates that the child is beginning to move towards the inclusion of a base line.

Drawing A13, (page 61) has figures and environmental features that float in the middle of the page, and have not yet moved down towards the baseline.

In drawing A10, (page 65) the base line has been excluded. This child has already started to make use of the plane. The figures have moved away from their placement at the bottom of the page, and are positioned within the environment.

5b. Adherence to Schematic Descriptors

Lowenfeld suggests that the Schematic inclusion of the base line or skyline indicates a child's readiness for formal learning. The percentage of Schematic adherence in this sample group was very high. Eleven of the fifteen drawings indicated one or more of these aspects, giving a total of 73%. In many of the drawings, the base line is implied. This means that although the child may not actually have drawn a line, the figures are all drawn rigidly in a straight line at the base of the page, indicating that they are standing on a surface.

Conclusions on the Six-Year-Old Sample

This collection of drawings indicates that although these children are six years old, the majority of them have already entered the Schematic Stage. These children should still be in the Preschematic Stage, although Lowenfeld states that his suggestions should be generalised, and not taken as the rule. In these samples, however, it is the rule, rather than the exception, that these children are using repeated images, and have schemas that indicate undeviated repetition. The majority of them have found geometric symbols for body parts, which are constantly repeated in their drawings. The base line and environmental detail is seen in the greater number of drawings.

This was a surprising result, and in order to verify this, I analysed the seven-year-old samples. Children of this age should only be entering the Schematic Stage, but could still be in the Preschematic Stage. According to Lowenfeld, the Preschematic Stage lasts approximately from the ages of four to seven years, and the Schematic Stage lasts from seven to nine years. The findings in the six-year-old sample seem to suggest that the majority of the children who are seven in this sample should be firmly within the parameters of the Schematic Stage.

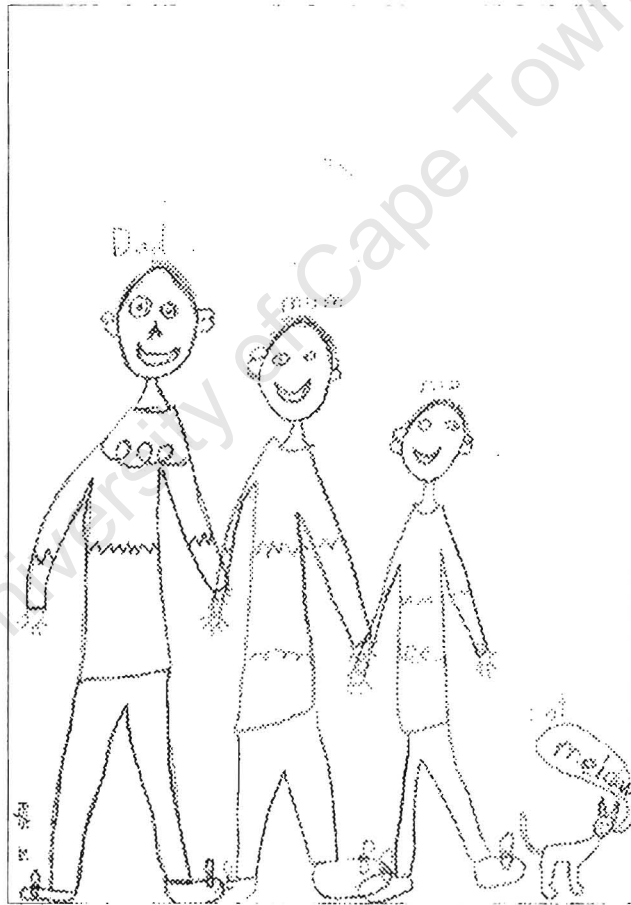
University of Cape Town

THE SCHEMATIC STAGE: SEVEN TO NINE YEARS OLD.

The Schematic Stage spans the ages of seven to nine. The children in this sample were tested against the descriptors for the Schematic Stage, to establish whether they were indeed in this Stage of Development.

The Seven-Year-Old Sample.

Number of drawings: 55

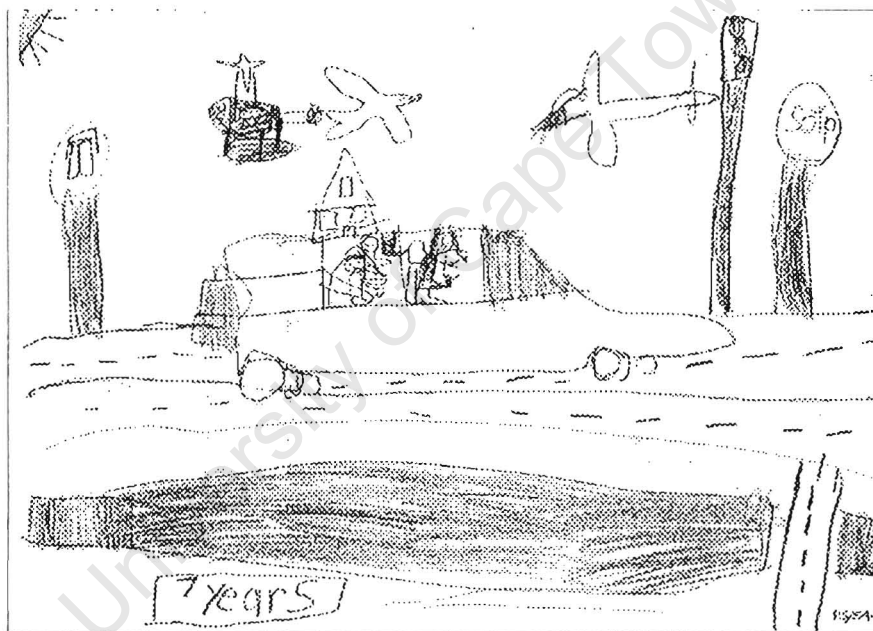


A22

This is a typical drawing by a seven-year-old child. The Schematic Stage is fairly established, and a repetition of schema and images is found. The

1a. Exceptions to the Schematic *Constant Repetition of Schema*

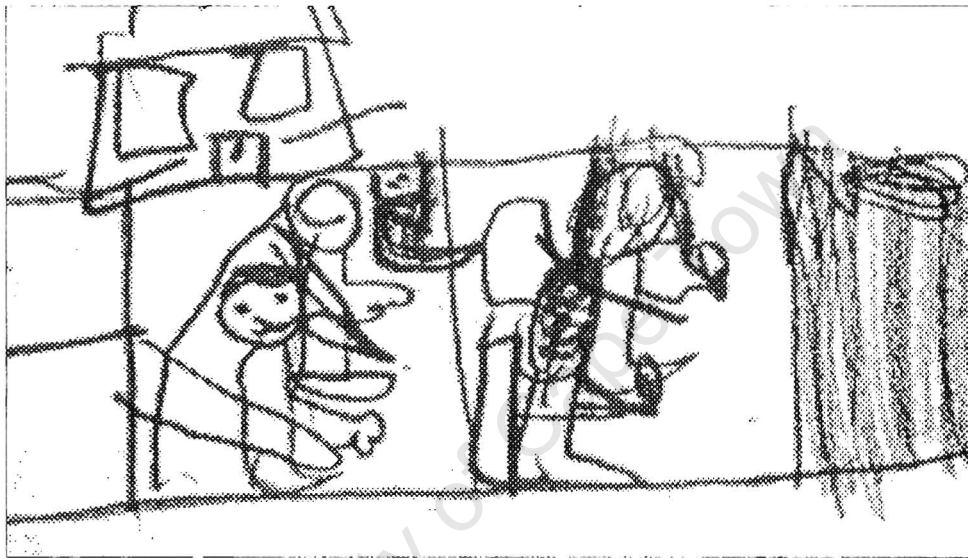
The only drawing that did not have a constant repetition of schema was drawing A15. It is difficult to ascertain whether this child would show a constant repetition of schema if a line of figures were to be drawn, but scrutiny of the drawing reveals that the facial features have been rendered differently.



A15

The face in the back seat of the vehicle that is closest to the viewer has dots for eyes, a curved line for a mouth, and no nose. The figure immediately to the right of this figure has a curved line to indicate eyes, and a straight line coming down from this curve. There is an indication of another, smaller figure to the right of this figure, but apart from two clear

dots that may indicate eyes, there are no features that are recognisable. The figures in the front of the vehicle also do not have any recognisable facial features. The bodies of all of these figures are indicated, but there is no repetition of schema evident.

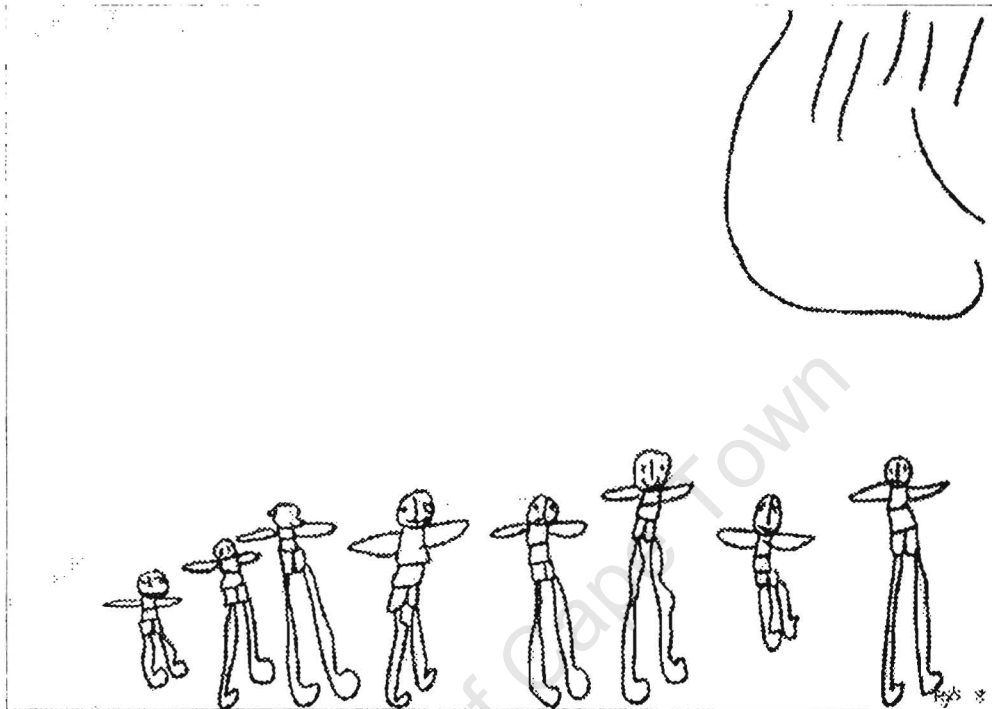


Enlargement of section of A15

1b. Schematic Adherence to Descriptor

Fifty four of the drawings display strong repetitive schema, giving a total of 98%. This percentage builds on and confirms the findings in the six-year-old sample, where 80% of the drawings demonstrated a constant repetition of schema.

Drawing A18 is an interesting example of the schematic stage.



A18

Although the schema is very meagre, and shows, when compared to some of the other drawings, a marked difference in the kind of imagery that is used, it remains an example of a Schematic drawing. There is a constant repetition of schema, as seen in the straight lines that are used for noses, the dots used for eyes, and the block shapes used to indicate bodies. All legs come from the split block of the lower torso, and all feet point to the right. None of the figures have had hands added to the ends of the arms.

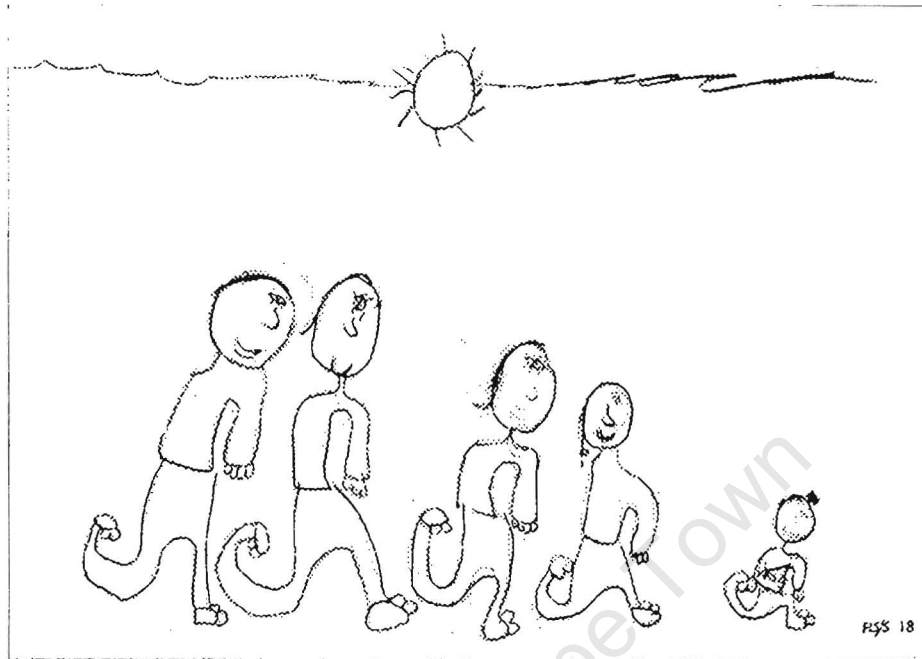
2a. Exceptions to the Schematic *Repetition of Images*

Once again, the only exception to this descriptor was A15 (page 76). The child has shown fluid, Preschematic marks, and has not clearly repeated images.

2b. Adherence to Schematic Descriptors

In this sample, 98% of the drawings showed strong responses. In the six-year-old sample, 80% of the drawings displayed a repetition of images. The findings in the seven-year-old sample confirm that by the time the children who participated in this study have reached the age of seven, they are already in the schematic stage, instead of being at the point of entry.

Drawing A20, shown overleaf, is an interesting example of an unusual interpretation of the human form, although it remains a typical example of a schematic drawing, with images repeated. The left legs are drawn straight down, and considerably shorter than the right legs. These are drawn in a circular motion, and extend beyond the sides of the figures. All of the figures have only one arm, which seems to indicate that they have been drawn from the side, in a running action. The faces, too, indicate profile, although this is a very personal interpretation of profile.



A20

The eyes, noses and mouths are drawn as if they are seen from the front, but each head has only one eye, placed on the side of the head. Although this is an unusual drawing, it still displays a repetition of images, figures along an indicated base line and environmental features. It therefore remains a good example of a Schematic drawing.

3a. Exceptions to the Schematic *Constant Schema of Body Parts*

Drawing A15 that was the exception.

3b. Adherence to Schematic Descriptors.

Fifty four of fifty five drawings adhered to this criterion. In the six-year-old sample, 80% of the drawings displayed this tendency, a finding that was confirmed by the 98% result in the seven-year-old sample.

4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

Only three drawings did not show this tendency.

In the seven-year-old sample, there are already drawings that include elements that are an exception to the Schematic Stage.



Drawing A21 includes human forms that are drawn more naturalistically, which indicates a movement away from the geometric forms of the schematic stage.

A21

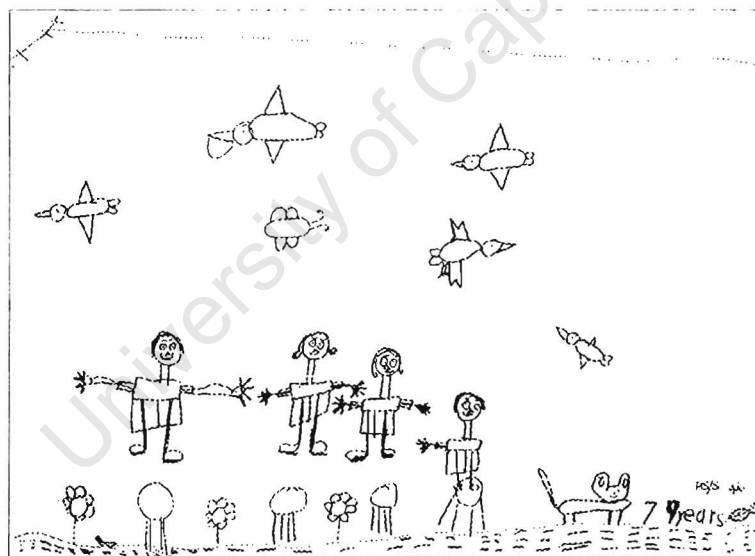
In this drawing, the strong geometry of the schematic stage has given way to sloping shoulders, and there is greater detail and individuality added to the figures. Although the schema for facial features remains fairly constant, the bodies are rendered with much more individual attention to

detail, as can be seen in the clothing, particularly on the females, and in the footwear.

4b. Adherence to Schematic Descriptors.

95% of the children in the seven-year-old sample made use of geometric shapes in their renderings of body parts, as opposed to the 60% in the six-year-old sample.

Drawing A34 offers a very clear example of this aspect of the schematic stage.



The heads of the figures are drawn as circles. The necks and shoulders are drawn as rectangular bars, from which emanate the rectangular arms. The lower torsos are rendered as two geometric blocks, through which the legs are drawn in an x-ray interpretation. The feet are semi-circles with

strong straight soles to the shoes. Even the facial features in this drawing are shown as geometric shapes. The eyes are circles enclosing dots, the noses are all triangular, and the mouths are semi-circular lines.

This tendency to make use of geometric shapes extends to the other forms in the drawing, and flowers are circles, surrounded by smaller circles for petals. A further image, which may represent trees, or some other kind of plant, is drawn as a circle, with four strong straight lines extending from the lower half. The birds and butterflies flying in the air above the figures are also constructed from strong geometric shapes. The bodies are fairly regular oval shapes, and the birds have triangular wings. The butterfly, or the bee, has semi-circular wings, which are attached to the oval body.

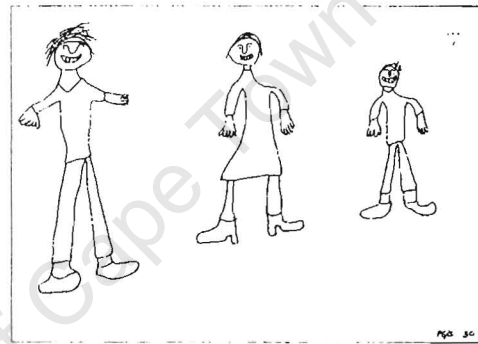
5a. Exceptions to the Schematic *Inclusion of the Base Line, whether real or implied, a Skyline and/or Environmental Features*

In the six-year-old sample, only one drawing showed no evidence of base or skyline, or any environmental features. There were only fifteen drawings in the six-year-old sample. Of the fifty five drawings in the seven-year-old sample, only two did not include any evidence of the above.

Even the two drawings that were exceptions in the seven-year-old group, A27 and A28, both had very strong indicators of other aspects of the schematic stage.



A27



A28

There is a constant repetition of schema in both of these drawings, images are repeated, and the body parts show a symbolic use of shape. A27 has a stronger geometric component than A28.

5b. Adherence to Schematic Descriptors

Fifty three of the drawings in this sample, or 96%, included a base line, a skyline, or attention to environmental detail. These figures suggest that the children who formed part of this sample group have already firmly entrenched themselves in the schematic stage.

Conclusions on Seven-Year-Old Sample

These findings indicate that these children are not in the process of *entering* the Schematic Stage, but have already established themselves, showing high percentages in all of the most important aspects. It is therefore suggested that the age of general entrance into the Schematic Stage is in the process of becoming at least one, but maybe even two years younger than Lowenfeld found when he did his research fifty years ago.

Drawing A33 is a typical Schematic Stage drawing, with one important exception: the base line has moved up, and has become the horizon. This indicates the child's deepening understanding of space, which is an important aspect of the Stage of Dawning Realism.



A33

Apart from this deeper horizon line and the attention to environmental detail, the drawing still displays a strong geometric component, and a repetition of schema, as can be seen in the facial features, the hands and the feet. This child is not yet adding important details like noses and ears to the drawing. Therefore, this drawing shows aspects of both the Schematic Stage and the Stage of Dawning Realism.

The results of the scrutiny of six- and seven-year-old drawings indicate an implication that the children in the eight-year-old group should all be in the Stage of Schematic Development. If this acceleration of stages continues, then it might even be possible that some eight-year-old children are beginning to enter the Stage of Dawning Realism, which should begin at approximately the age of nine.

In analysing the eight-year-old sample, it therefore becomes necessary to test these children against the descriptors for the Schematic Stage, and also for the descriptors for the Stage of Dawning Realism.

The Eight-Year-Old Sample.

Number of drawings: 45.



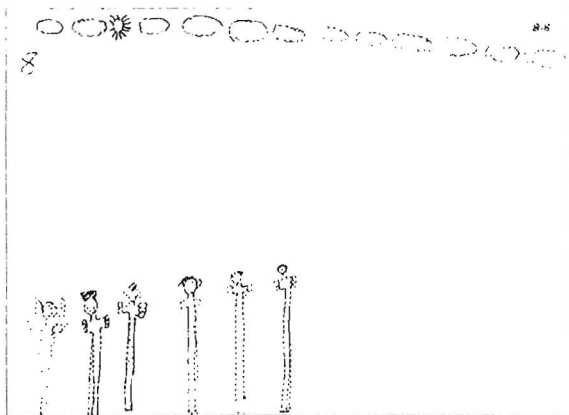
A63

This is a typical drawing made by an eight-year-old child. The Schematic Stage is firmly established by the repetition of schema and of some images, the use of geometric shapes, and the inclusion of a base line. As the child grows more aware, further details have been added. There is greater interest in the environment, and more detail is gradually being added to the drawing. This can be seen in the addition of animals and inanimate objects.

Children of eight should generally be in the Schematic Stage, although Lowenfeld says quite emphatically that this is a generalisation to enable

1a. Exceptions to the Schematic *Constant Repetition of Schema*.

In the eight-year-old sample, only two drawings in the sample of forty five did not show constant repetition of schema. These drawings were A48 and S8.36.



A48

Drawing A48 is still in the Preschematic Stage, showing evidence of an emerging schema. There is still great flexibility in this drawing, which is a typical aspect of the Preschematic Stage.



A59

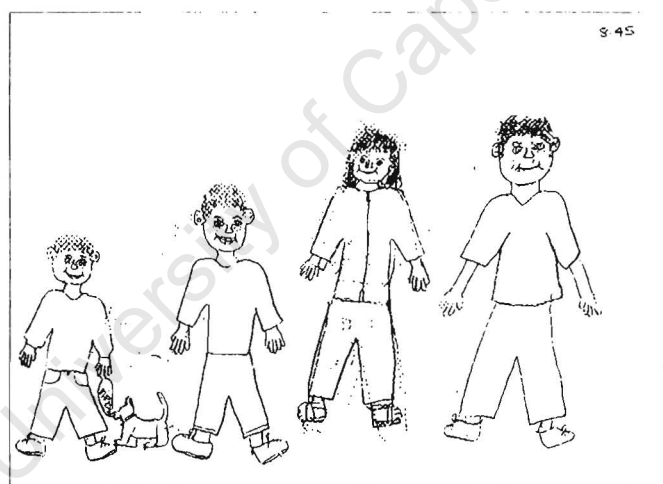
Drawing A59 is also still a Preschematic drawing. There is flexibility in the way the figures are portrayed, and the schema is not yet constantly repeated.

Although the three figures all have eyes that are similar, only two of them have noses. The hair on each figure has been approached differently, as have the hands and feet.

It must be stressed that these two drawings are the exception in this sample. In all of the other samples, the drawings show a clear and constant repetition of schema.

1b. Schematic Adherence to the Descriptor

Forty three of forty five drawings adhered to the constant repetition of schema, giving a total of 96%. In A64 we can see the schema being repeated, but as the child's experience of the world deepens, the schema becomes more enriched, and more details are added.



A64

2a. Exceptions to the Schematic Repetition of Images

In the seven-year-old sample, only one drawing did not adhere to this criterion. In the eight-year-old sample, only two drawings deviated. Once again, the exceptions were A43 and A59 (page 89). Neither of these

drawings contained significant repetition. The children are still enjoying the flexibility of the Preschematic Stage, where each new experience influences the drawing, and changes the modes of depiction.

2b. Adherence to Schematic Descriptors.

Once again, forty three drawings adhered to this descriptor, giving a percentage of 96%.

3a. Exceptions to the Schematic *Constant Schema of Body Parts*.

In the seven-year-old sample, only one drawing was an exception. In the eight-year-old sample, three drawings of forty five did not meet these requirements.

Drawings A43 and A59 (page 89) were once again examples, still showing the flexibility of the Preschematic Stage. A further drawing, A57, shown overleaf, is also an exception, as it does not show a constant schema for body parts.

In this drawing, however, the child has begun to move away from the rigidly applied schema, and is showing individual differences in a move towards realism. Some of the heads are drawn in profile, and some are drawn from the front.

Some of the mouths are drawn with two lips, and one is drawn as a curved line. Some of the hands are drawn as dark circles with lines emanating from them, and the figure third from the left has circles with five fingers attached.



The feet are all handled in different ways, showing different types of shoes or bare feet. Clothing is also different for each figure, and the hair has been handled uniquely. Therefore, although this percentage is lower than the seven-year-old group, it does not indicate that a lower number of children have entered the Schematic Stage. It includes the fact that one of the children has already started to move away from the rigid representations of schema that is so typical of the Schematic Stage, and has begun to include aspects of the Stage of Dawning Realism.

3b. Schematic Adherence to the Descriptor

A44 is a typical example of an eight-year-old displaying strong constancy for the schematic representation of body parts.



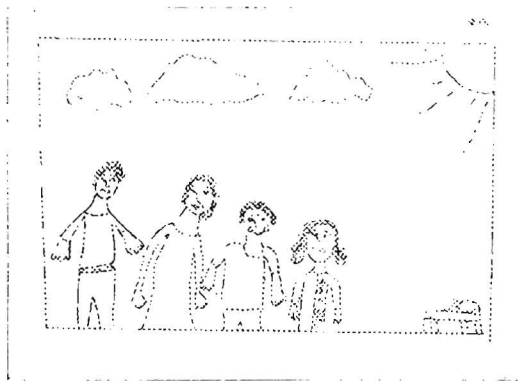
A44

Hands, shoes, arms, and legs are all drawn in the same way. In keeping with a deepening awareness, the child has started to add enriched environmental detail.

4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

Some of the drawings in this age group which did not make use of a strong geometric component showed evidence of attempted realism. There were only four drawings that did not make use of geometric shapes to construct the human body.

These exceptions were A46 and A50, shown on this page, and A54 and A58, which may be found in the appendix.



In drawing A46, the body parts are rounder, and move closer towards being part of the whole, instead of being separate geometric shapes which are simply linked together to create a human form.

A46

In drawing A50 the non-geometric slope from the neck into the shoulder indicates a movement towards more naturalistic shapes, which is an



aspect of the stage of Dawning Realism. Although the facial features remain strongly schematic, the figures show individual differences in the treatment of the clothing and the hair. The feet and hands move

A50

closer to realism, and could stand apart as feet and hands if they were removed from the whole. Arms are more individually treated, and do not rely on a recognised schema.

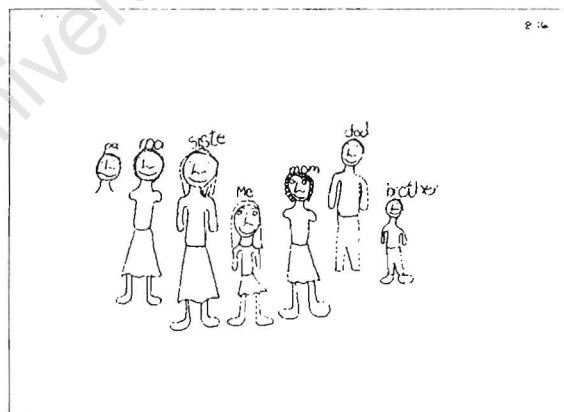
In both A54 and A58, (appendix), there is a tendency to move away from geometric shapes, and towards the more natural shapes that are found in the stage of Dawning Realism.

4b. Adherence to Schematic Descriptors

Forty one of the forty five drawings (91%) made use of geometric shapes in the rendering of bodies.

5a. Exceptions to the *Schematic Inclusion of base line, skyline or environmental features*

Drawings A4C, discussed overleaf, A48, shown below, A53 and A55 (appendix) show figures that float on the page, without any evidence of baseline or skyline, and no environmental factors at all.

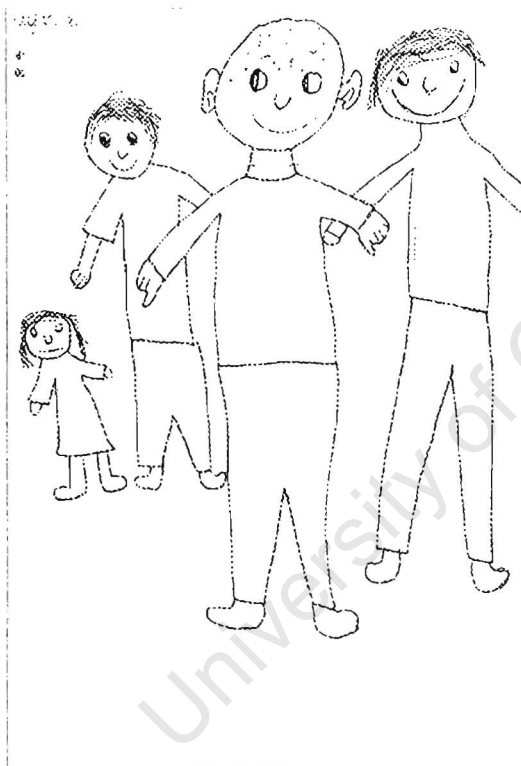


A48

The schema in all of these drawings is very meagre. All three contain some, although not all, of the aspects of the Schematic Stage.

It is interesting that only A40 showed evidence of moving away from the schematic stage, with an attempt at overlapping which placed the figures on different levels on the page.

This child shows an advanced understanding of space, demonstrated in



the overlap of the arms over the figures in the background, and by the different levels at which the feet are placed, indicating distance. The child has also reached an understanding of scale and proportion; the figures in the background are smaller than the figure in the foreground.

A40

A further drawing, A60 (appendix) is more difficult to scrutinise. The child has made extensive use of erasing, and the drawing is not completed. I have therefore chosen not to make any comment on this drawing, save to

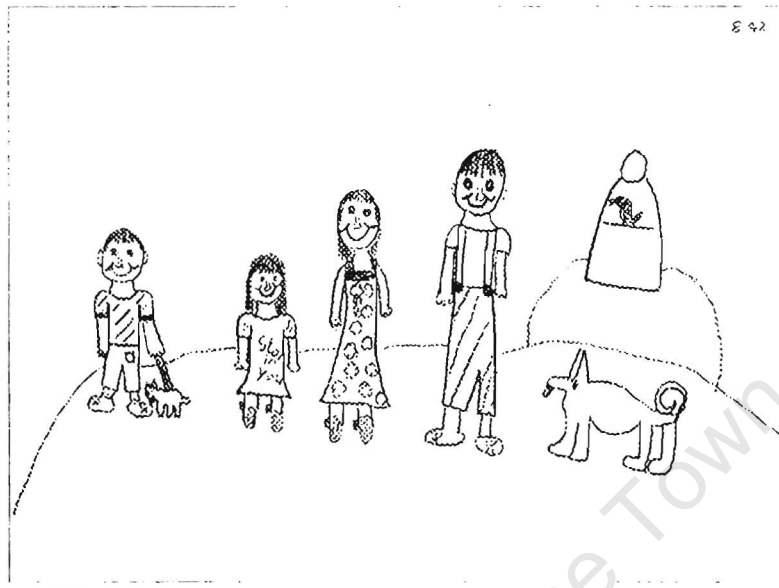
say that it does not have the necessary elements to make it part of the positive percentage for this aspect.

5b. Adherence to Schematic Descriptors.

Forty of these drawings, or 89%, displayed an adherence to this descriptor by using all or some of these inclusions.

Although these observations are intriguing, they do not detract from the fact that these eight-year-old children were still firmly rooted in the Schematic Stage, with a large majority of drawings that contained typical aspects. This same sample was checked against the descriptors for the Stage of Dawning Realism.

It is interesting to note that, although the large majority of eight-year-old children have not yet moved into the next stage, there is already a tendency towards greater detail, which is an important aspect of the Stage of Dawning Realism, in 49% of the drawings.



A62

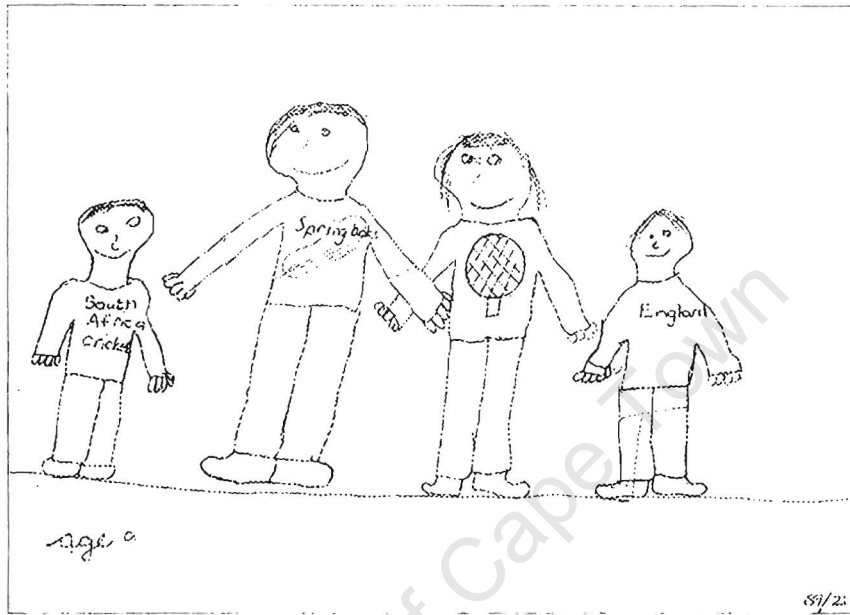
Conclusions on Eight-Year-Old Sample

The eight-year-old sample reveals that these children are still drawing in the Schematic Stage of Development, with significantly high adherence to each Schematic descriptor. The only area where they appear to be approaching the transition into the Stage of Dawning Realism is in the inclusion of greater detail. This is an interesting result, because, as children entered the Schematic Stage somewhat earlier than seven years old, one would have expected an earlier movement towards the Stage of Dawning Realism. This does not appear to be occurring with any significance.

THE STAGE OF DAWNING REALISM: NINE TO TWELVE YEARS

The-Nine-Year-Old Sample

45 drawings.



A73

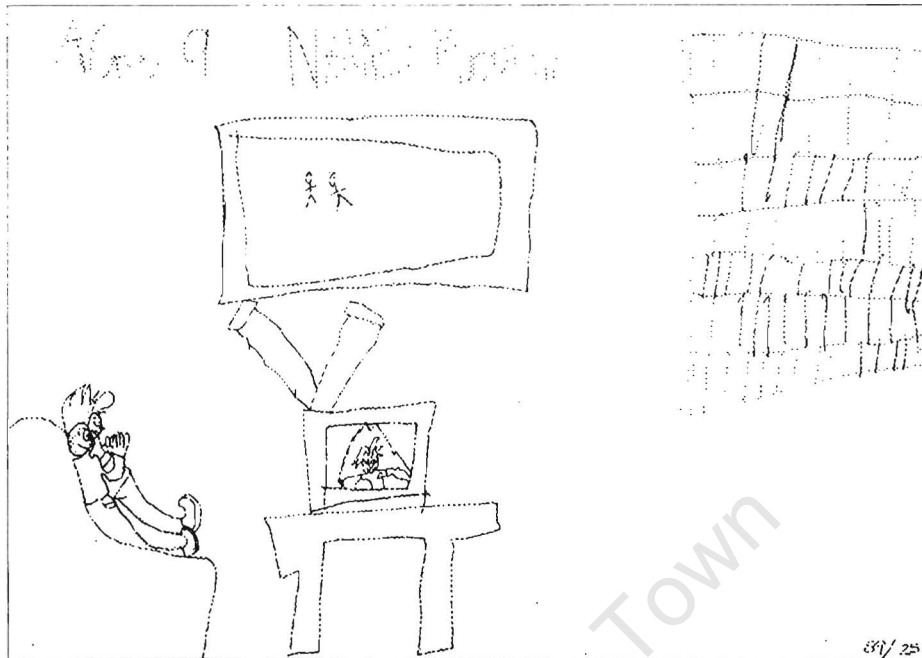
This is a fairly typical example of a drawing completed by a nine-year-old child. Although there is still much evidence of a schema, in the repeated use of symbols for facial features, hands, hair and feet, the child has started to use more natural forms for the body, and the geometric shapes are beginning to disappear, as may be seen in the heads growing naturally from necks, and the sloping shoulders. Although the figures still stand in a straight line, indicating a base line, the child reveals the beginning of an understanding of space by overlapping parts of the arms

and hands of the two central figures. More detail begins to appear in the individual treatment of the clothing of the figures.

As there was little evidence that a majority of the children in the eight-year-old group had begun to move towards the Stage of Dawning Realism, it became necessary to test whether the children in the nine-year-old group are still largely in the Schematic Stage. They would then also be tested against the descriptors for the Stage of Dawning Realism.

The Schematic Stage lasts from seven to nine years, and that the Stage of Dawning Realism begins at about nine years of age. This suggests that children who are nine years old should be making drawings that contain some or many elements of the Stage of Dawning Realism, as this is a transitional age. More of the drawings should be making use of **natural shapes**. There should be a **greater inclusion of detail**, and **more of an awareness of space**. **Figures should be placed within a plane**, rather than in a straight line. There should be a **greater exploration of overlapping**.

The fact that the children in this sample had already entered the Schematic Stage at the age of six could suggest that the Stage of Dawning Realism could also be entered at an earlier stage.



A77

This drawing is interesting, because it reveals the use of stick figures in the painting on the wall, but a detailed frontal view of the character on the television. The viewers of the programme are drawn in profile. In all three of these exceptions, there is a movement towards the more individual rendering of the Stage of Dawning Realism.

1b. Adherence to the Schematic descriptor.

Forty three of these drawings, or a significantly high 93%, are still making use of the Schematic constant repetition of Schema.

2a. Exceptions to the Schematic *Repetition of Images*.

Only two drawings in this sample do not show a repetition of some images., They are A74, (appendix) and A77, pictured above.

2b. Adherence to the Schematic Descriptor

In both the eight- and nine-year-old samples, forty three drawings show a repetition of some images.

3a. Exceptions to the *Schema of Basic Parts Remains Constant*.

Four drawings did not include this descriptor. Exceptions were A66a, A66b and A81 (appendix), and A77 (page 103).

3b. Adherence to the Schematic Descriptor

Forty one drawings, or 91%, contained a constant schema for body parts.

4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

An interesting difference between the eight- and the nine-year-old sample began to emerge. In the eight-year-old sample, only four drawings did not make use of geometric shapes to render their figures. In the nine-year-old sample, eleven children have begun to use more natural shapes, and to draw body parts which do not lose their meaning when they are separated from the whole.

This reveals that in this descriptor, there is a progression, in the nine-year-old sample, towards the more natural rendering of the human form, which is one of the descriptors for the Stage of Dawning Realism.

Drawing A70 is one of the exceptions.



A70

Although the heads are fairly circular, the body parts have achieved an organic quality, and one of the figures even has an indication of knees. The shoulders slope quite naturally from the necks, and the hands form part of the arms, and are not separate shapes that have been added on at the end of a rectangle. The feet are naturally drawn at the ends of the legs, showing irregular toes. The dress of the little girl on the centre left even has an indication of a waist line. The clothing begins to 'fit' the body, and not define it.

4b. Adherence to the Schematic Descriptor

Although still a high percentage, thirty four drawings (76%) made use of geometric shapes in their renderings, as opposed to 91% in the eight-year-old sample. Although this is the most significant difference encountered between the eight-year-old and the nine-year-old sample, there is still an indication that the majority of nine-year-olds make use of geometric shapes for body parts. They are thus still largely using this element of the Schematic Stage in their spontaneous drawings.

5a. Exceptions to the *Schematic Inclusion of base line, skyline or environmental features*

Six drawings in this sample did not show this element.

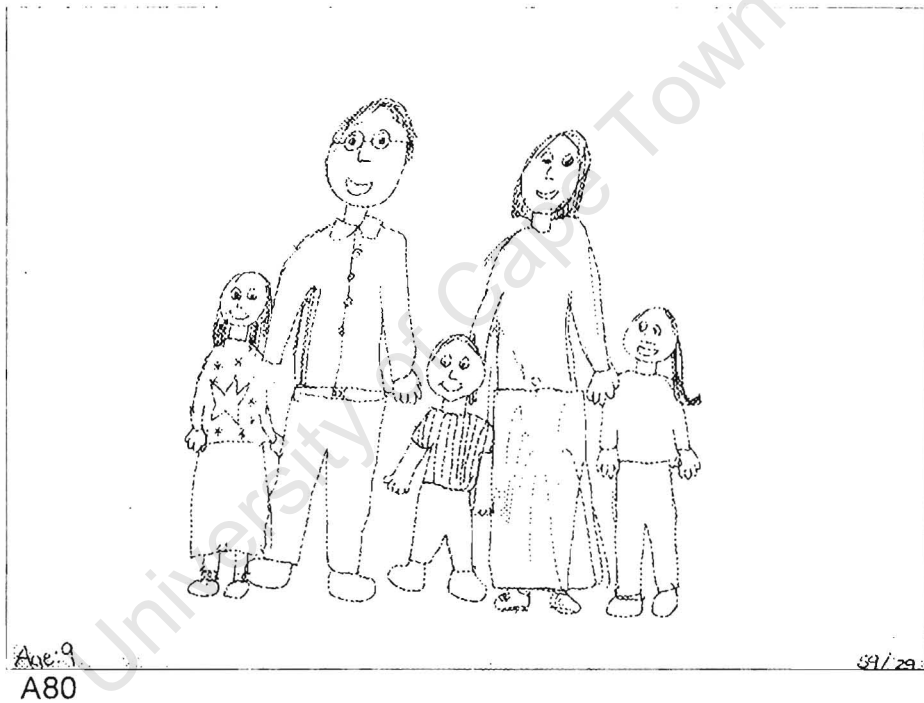
5b. Adherence to the Schematic Descriptor

Thirty nine drawings, or 87%, still included one or more of these elements. The 2% difference between the eight- and nine-year-old samples is not significant.

Although it is fairly clear that the nine-year-old children are still largely showing descriptor characteristics of the Schematic Stage to define their drawings, with percentages above seventy five in each of the descriptors, this sample was tested against the descriptors of the Stage of Dawning Realism.

1. *More Natural Shapes*

There were eleven drawings in the nine-year-old group (24%) that had begun to discard geometric shapes in favour of more natural shapes, as opposed to four (9%) in the eight-year-old sample. A80 shows this trend quite clearly.

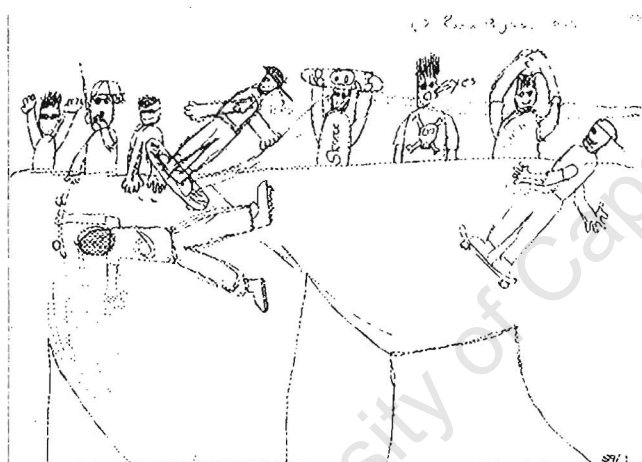


The shapes of these figures are generally rounder, displaying a greater degree of realism. The body parts are clearly body parts, and not simply an assembly of geometric shapes.

2. More Detail

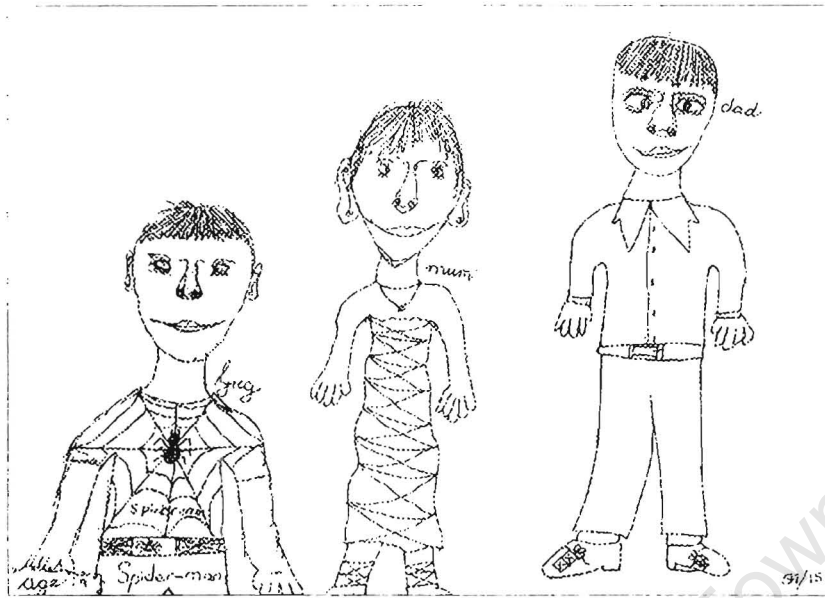
In the eight-year-old sample, 22 drawings (49%) included more detail. There is a slight increase in the nine-year-old sample, with 25 drawings (55%) displaying this trend.

Examples of this are drawings A65 and A71. In A65 we see a group of boys skateboarding, and the drawing includes skateboards, ramps, and



greater detail in the clothing. Attempts have been made to show different movements and body posture of the figures.

A65



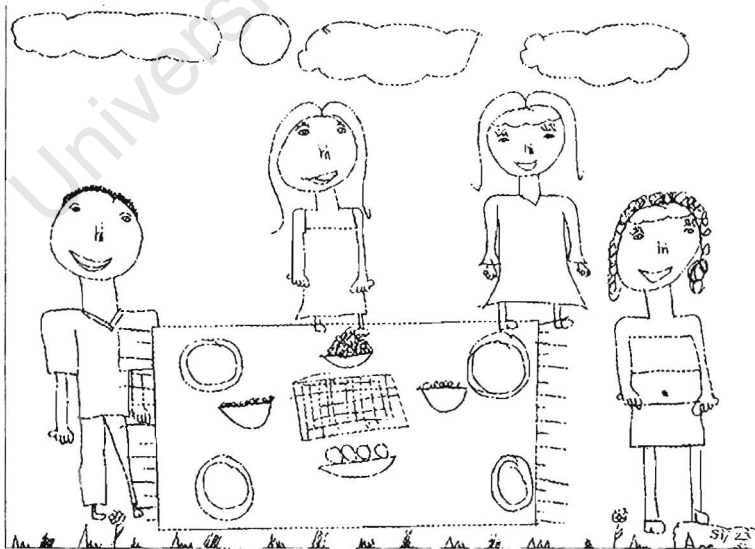
A71

In A71, there is detail in the attention paid to the rendering of facial features, clothing and accessories. Although there is still a facial schema that is repeated, there is more detail in the noses and the eyes, and a move towards realism. The male figures show interesting belts, buttons on shirts, and designs on a T shirt. The female figure is wearing earrings and a necklace. The shoes of one of the figures have laces. The cuffs of this same figure are carefully drawn, and the buttons are represented by a dot on the wrist. The hair of the figures has been given an individual treatment, and the child has shown a cut-off view of space.

3. Introduction of the Plane

In the Stage of Dawning Realism, the single base line becomes a plane. In the eight-year-old sample, nine drawings (20%) showed this tendency, whereas in the nine-year-old sample, the figure was doubled to eighteen drawings (40%).

In drawing A75 the entire surface of the page becomes the plane, and the figures are drawn at different levels on the page. The blanket is still tipped up as an elevation to show the onlooker what is being enjoyed at the picnic. The base line has not been omitted completely, and is indicated as a row of grass at the bottom of the page. The child is moving between the need to insert a base line, and the need to show a deeper awareness of space.



A75

4. *Overlapping*

Overlapping was shown in only five of the drawings in the eight-year-old sample (11%), whereas seventeen drawings (38%) in the nine-year-old sample employed this spatial awareness.

5. *Bodies more natural*

The same number of eight-year-olds (11%) retained their facial schema while the bodies were portrayed more naturalistically, but in the nine-year-old sample, this increased to 33%.

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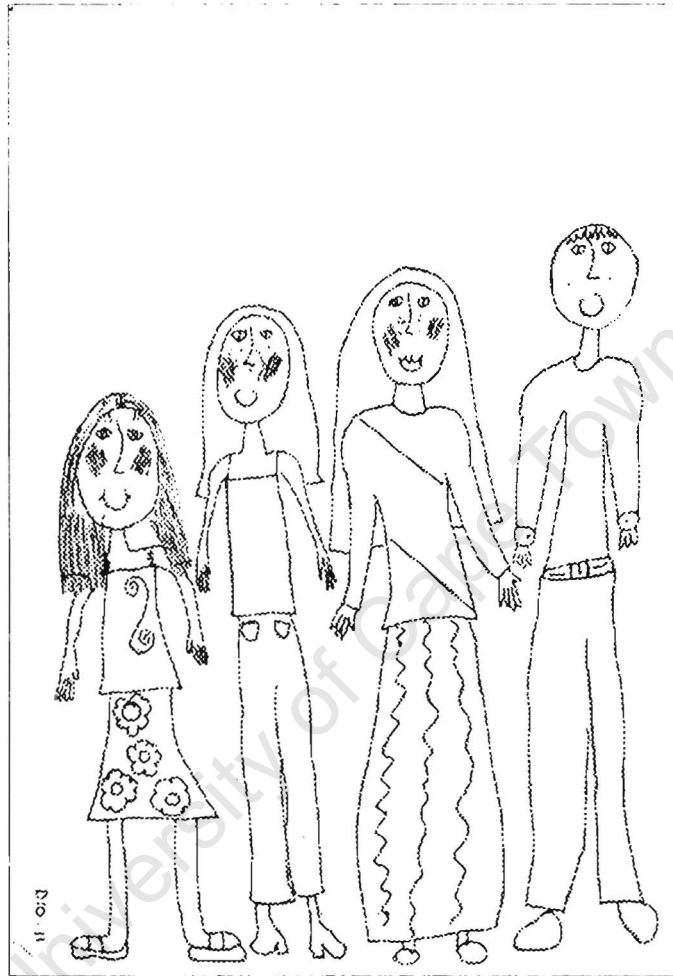
Conclusions on Nine-Year-Old Sample

There seems to be an indication that the nine-year-old group of children are very slowly moving towards the Stage of Dawning Realism. They are including more detail in their drawings, there is *some* evidence of overlapping, and the spatial awareness is developing into a plane, rather than a straight line at the bottom or the top of the page.

It is, however, important to note that the majority of these children are still creating drawings that largely belong to the Schematic Stage of development, and have not yet progressed through to the Stage of Dawning Realism. This would indicate that although children appear to be progressing from the Preschematic Stage to the Schematic Stage at an earlier age, there is a lag in their progression from the Schematic Stage to the Stage of Dawning Realism. In order to test this hypothesis, it becomes necessary to compare the drawings of the ten-year-old sample against both the Schematic Stage and the Stage of Dawning Realism.

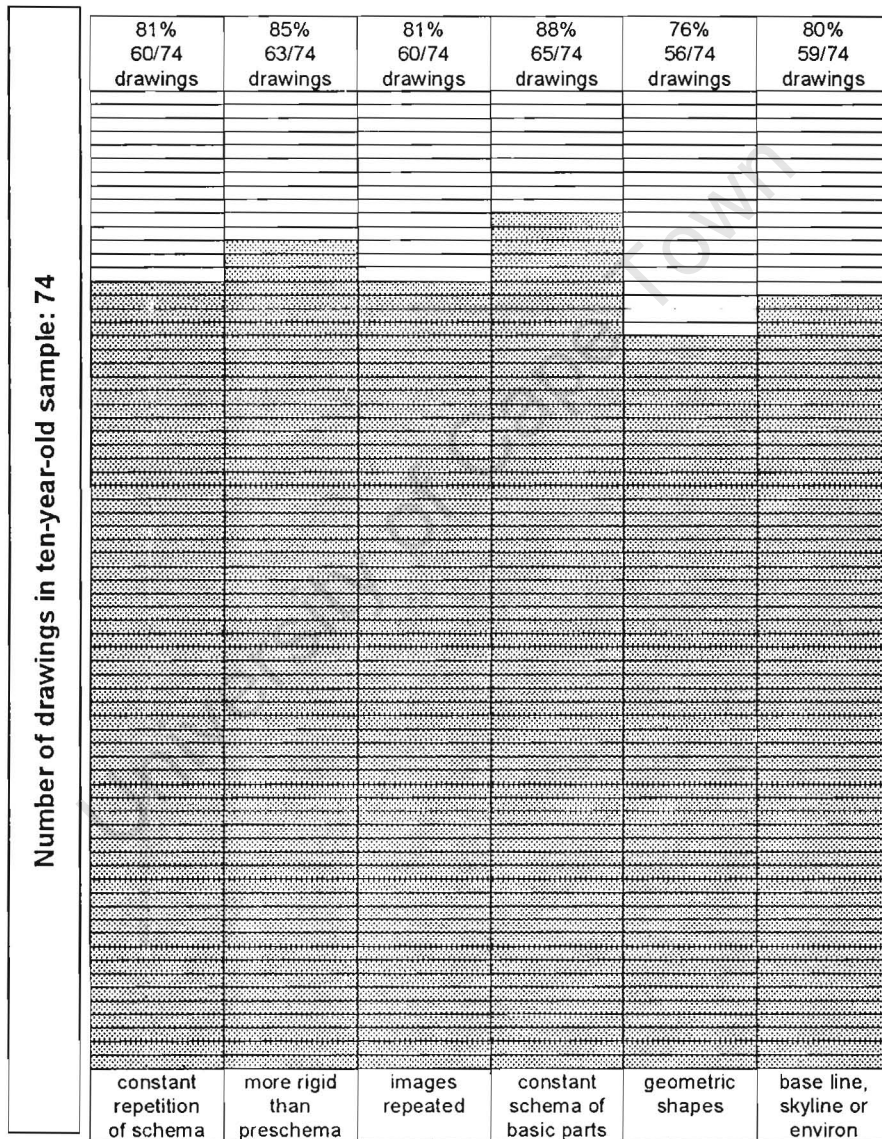
The Ten-Year-Old Sample:

74 drawings.



This is a typical drawing by a ten-year-old child. The figures have discarded the geometric forms completely, and are more natural and realistic in their rendering. Each person is treated with more individuality, and greater detail is used in the treatment of the clothing. Although there is no evidence of overlapping in this example, this technique is often

employed by ten year olds. Space could also be handled more naturalistically, with a plane replacing the base line. There could be more detail in the treatment of the environment. When the ten-year-old sample is tested against the Schematic Stage, the following results are obtained:

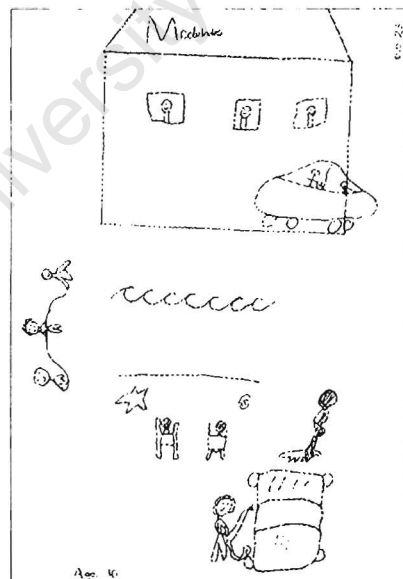


Graph showing percentages of adherence by ten-year-old children to the Schematic Stage descriptors

In these surprising results, it becomes evident that most of the children in the ten-year-old group are still using Schematic Stage descriptors in their drawings. There is a shift that cannot yet be called significant, and the percentages are generally lower for adhering to the Schematic Stage, but in each category, more than 75% of the drawings reveal schematic stage development.

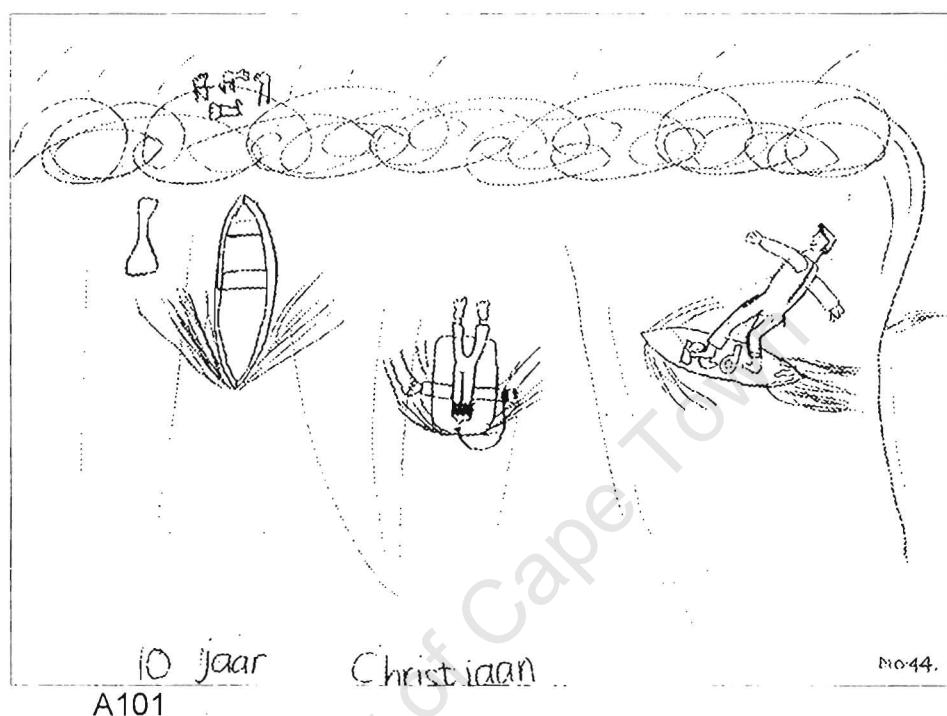
1a. Exceptions to the Schematic *Constant Repetition of Schema*

Of the fourteen exceptions, not all of them displayed a movement away from this tendency. In some cases, as in drawing A97, the child has not yet reached a stage where the schema is repeated, and is still exploring and discovering alternatives for the human form.



A97

In drawing A101, the child has moved beyond the use of a schema, and is making use of more realistic images for the portrayal of the human form.



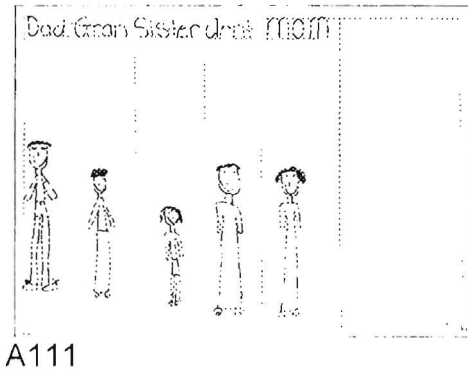
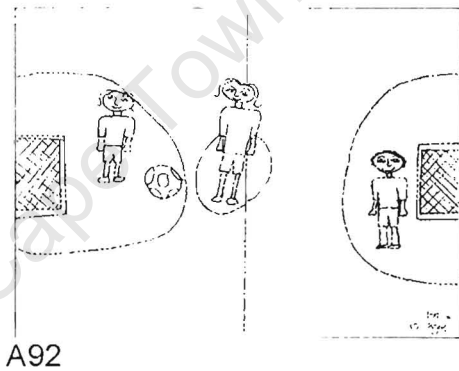
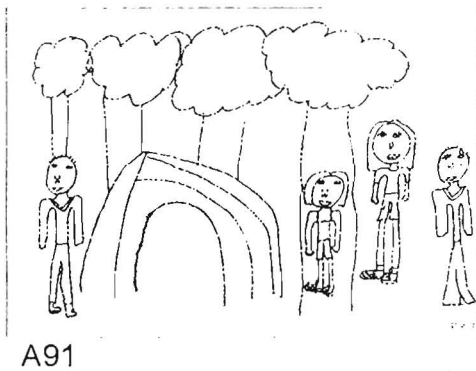
Notice in this drawing the attempt to draw feet from different angles, and an attempt to draw a head as it would look if viewed from the top down. The legs of the surfer are bent, and the arms are extended in a search for a more realistic pose.

In the top left area of the drawing, an attempt has been made to show a submerged surfer, using only the hands and feet to suggest this.

1b. Adherence to Schematic Descriptors.

In the nine-year-old group, 89% of the children made use of a constant repetition of schema. In the ten-year-old sample, this figure dropped to 81%.

However, the majority of the drawings adhere fairly strictly to a constant repetition of schema, as may be seen in the four examples below:



2a. Exceptions to the Schematic Repetition of Images.

Whereas only 4% of the nine-year-old sample did not make use of the repetition of images, this figure grows to 19% in the ten-year-old sample.

2b. Adherence to Schematic Descriptors.

In the nine-year-old sample, 96% of the drawings reflected this descriptor. In the ten-year-old sample, 81% of the children repeated some images. There is a movement towards more individual solutions, although once again, this movement is not significant, when viewed in combination with the other aspects of the schematic stage. These children should be displaying a significant shift into the Stage of Dawning Realism, and yet they are still largely using the descriptors for the Schematic Stage of Development.

3a. Exceptions to the Schematic *Constant Schema of Body Parts*

Only 12% of the children in the ten-year-old sample did not use a constant schema for body parts. This represents a mere 1% difference from the nine-year-olds, and does not indicate a shift in the rendering.

3b. Adherence to Schematic Descriptors.

88% of the ten-year-old sample made use of a **constant symbol for body parts**, showing hardly any difference from the nine-year-old sample.

4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

There was no difference between the percentages of the nine-year-old sample and the ten-year-old sample for this descriptor.

4b. Adherence to Schematic Descriptors.

76% of the children in the ten-year-old sample constructed their bodies from geometric shapes, a percentage that exactly echoes the nine-year-old sample.

5a. Exceptions to the Schematic *Inclusion of base line, skyline or environmental features*

Only 20% of the children in the ten-year-old sample have moved away from the use of the base line or the skyline. This is an important descriptor, as it deals with the child's deepening understanding of space, and yet the ten-year-old children in this sample are displaying a scant understanding of this concept.

5b. Adherence to Schematic Descriptors.

80% of the ten-year-old sample made use of a base line, a skyline or environmental features, whereas 87% of the children in the nine-year-old group made use of these features.

When the ten-year-old group was measured against the descriptors for the Stage of Dawning Realism, the differences were no more significant, when compared to the nine-year-old sample.

human body, and are still content to make use of the geometry of the Schematic Stage.

2. More Detail

57% of the children in this sample adhered to this descriptor. In the nine-year-old group, it was 55%. This shows a gradual movement towards to the inclusion of more details, and is the only descriptor for the Stage of Dawning Realism that exceeds the halfway mark. A significant 32 children, of a sample of 74, are still using simple methods of portrayal.

3. Introduction of the Plane

45% of these children were moving from the single base line, and using a plane in their drawings. In the nine-year-old sample, this figure is 40%. This seems to suggest that there is a gradual movement towards a more realistic understanding of space, although the difference is not significant.

4. Overlapping

When overlapping is investigated, only 34% of the children made use of this process. The difference does not appear to be as significant as the difference between the two sample groups in the aspect of greater detail. The nine-year-old sample shows a percentage of 38%.

5. Bodies more natural

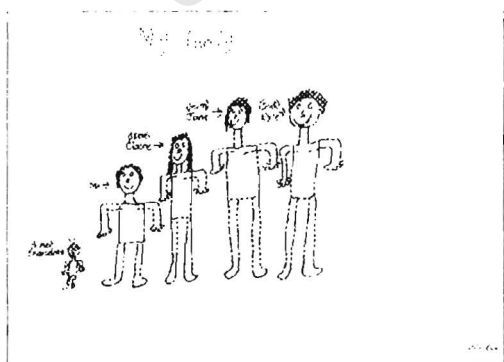
In the nine-year-old sample, 33% of the children drew the body more realistically, while the facial schema remained constant. In the ten-year-old sample, only 24% of the drawings revealed this aspect.

Conclusions on the Ten-Year-Old Sample

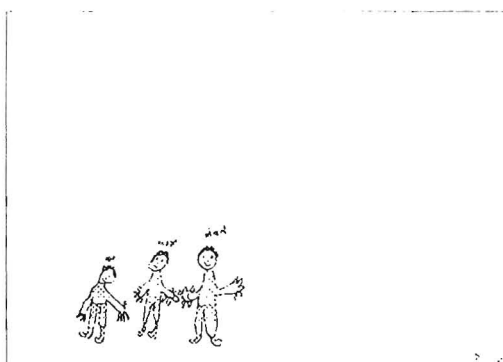
In the general scrutiny of the ten-year-old sample, there appeared to be an appearance of a more meagre schema, less detail, and less awareness of environmental features.

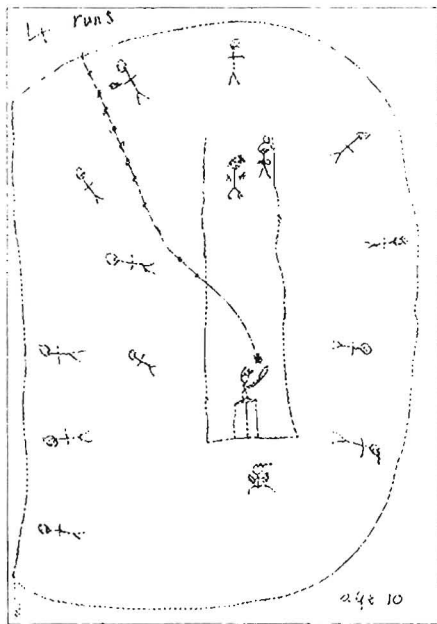
The drawings of this age group seem to indicate a lack of involvement in the drawing process, and a lack of awareness of the human body, space and the environment. Very little additional detail has been used. Many drawings reveal aspects of Schematic Stage, or even earlier development, as may be seen in the two drawings below.

A110



A108





In drawing A114 there is evidence that even the Schematic Stage has not yet been achieved. The significant figures are rendered with flexible detail, while the others remain simply linear stick figures.

A114

These results reveal an interesting deviation from the anticipated progression. It is beginning to be evident that it is no longer possible to categorise these drawings into definite stages. Some children show evidence of some aspects of one stage, and some of another. Some children appear to be in the Stage of Schematic Development, but display an advanced understanding of space. Others make drawings that have discarded the use of geometric shapes, include much more detail, but line the figures along a very clear base line. It appears that children develop in different areas at different times, and that a typical or linear development is no longer easily definable.

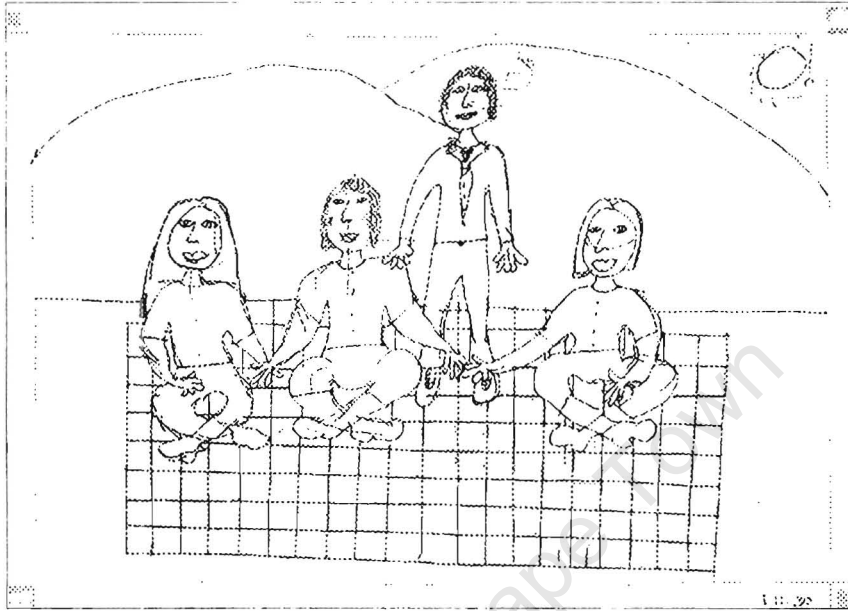
I compared the eleven-year-old sample against the descriptors of the Schematic Stage, to ascertain whether these children have left this stage

behind them, and have moved into the Stage of Dawning Realism, as Lowenfeld states. According to Lowenfeld an average eleven-year-old child should be displaying most of the aspects of this later stage.

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The Eleven-Year-Old Sample:

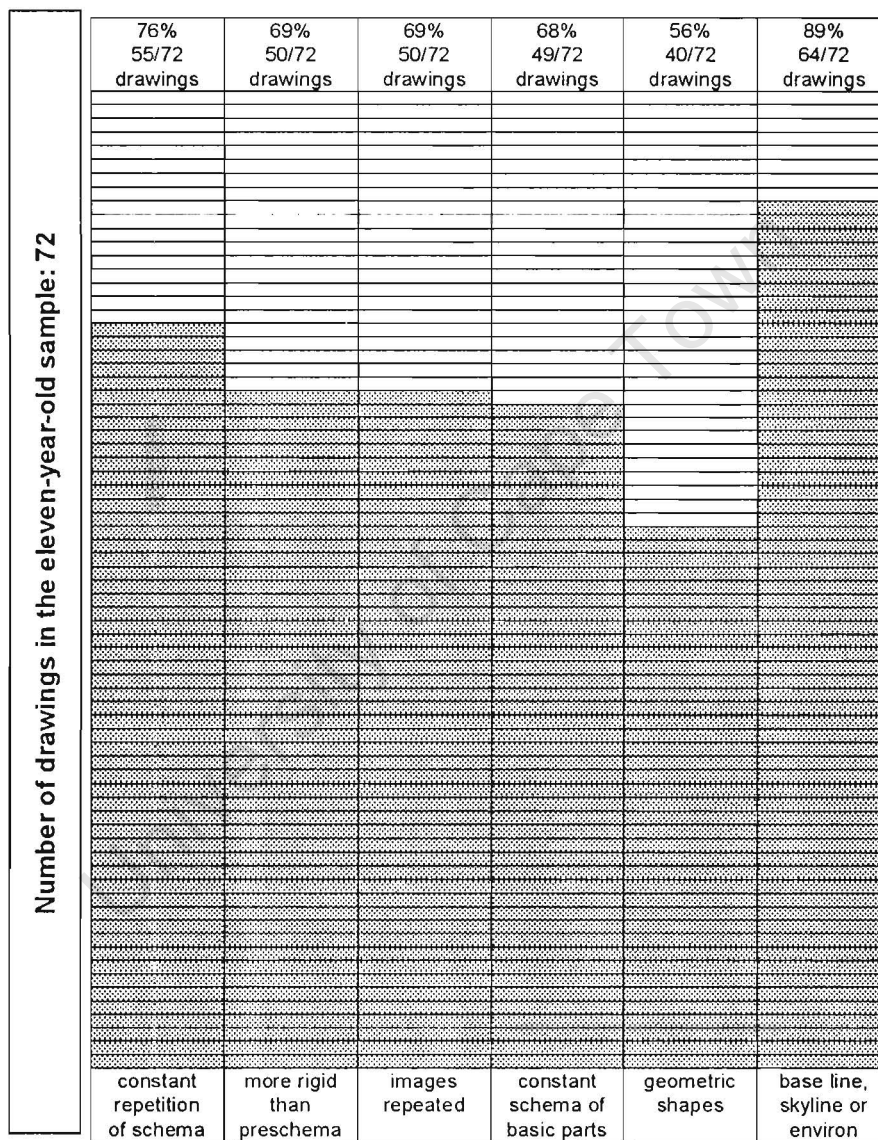
72 drawings.



A122

This is a typical example of a drawing made by an eleven-year-old child. The bodies, no longer geometric, are depicted with a degree of realism. An attempt has been made to show crossed legs. The bodies are handled individually, although the faces still show a degree of schematic representation. The base line has moved upwards to create a horizon, and the figures are drawn within a plane. Gaining an understanding of space, the child is able to show the concept of overlapping. Environmental detail, although scant, is included in the background, and greater detail is added to areas of the drawing. The squares on the blanket have been very carefully drawn, as the test dots indicate.

The eleven-year-old sample is tested against the indicators for the Schematic Stage, because the ten-year-old sample did not indicate that the majority of children had moved into the Stage of Dawning Realism.



Graph showing percentages of adherence by eleven-year-old children to the Schematic descriptors

This sample indicates a definite shift away from the Schematic Stage, as these children begin to change their approaches to drawing. Although in

each descriptor, there is a percentage of more than 50% in favour of the Schematic Stage, these percentages are all lower than the ten-year-old sample and seem to suggest that the children in this sample group are finally moving towards the Stage of Dawning Realism. The exception to this is in the inclusion of the base line, the skyline, or environmental features, and this will be discussed later.

1a. Exceptions to the Schematic *Constant Repetition of Schema*

24% of these children were not using a constant repetition of schema. In the ten-year old sample, this figure was 19%

1b. Schematic Adherence to Descriptor

76% of the children were still adhering to this descriptor, as opposed to 81%

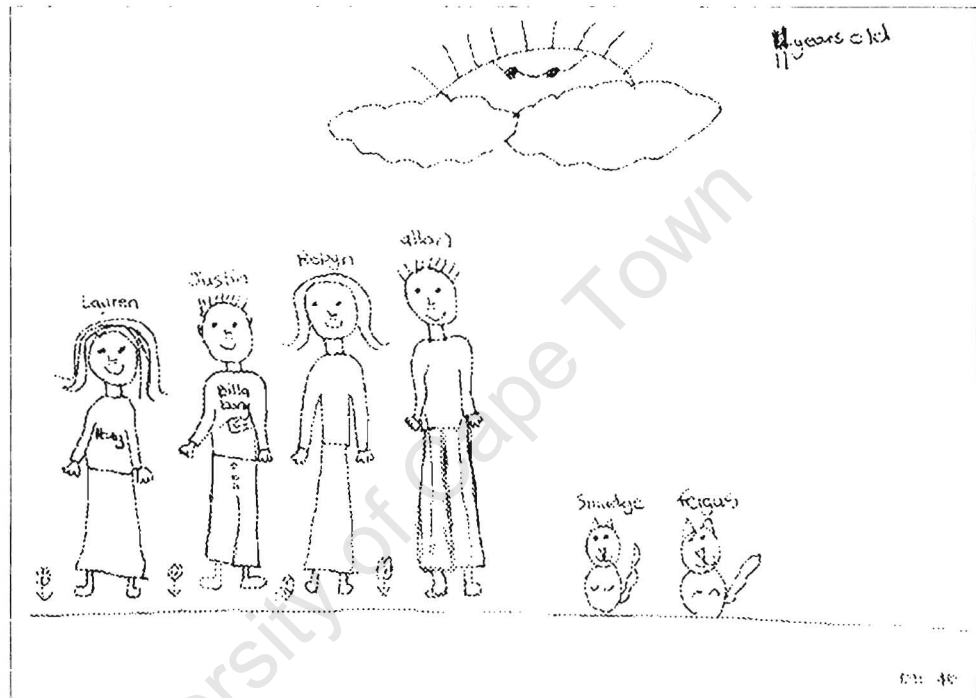
2a. Exceptions to the Schematic *Repetition of Images*

A growing 31% in this sample were not using a repetition of images. In the ten-year-old sample, this figure was 19%.

2b. Schematic Adherence to Descriptor

69% of the children in the eleven-year-old group drew some images repeatedly. In the ten-year-old group, this figure was much higher, at 81%.

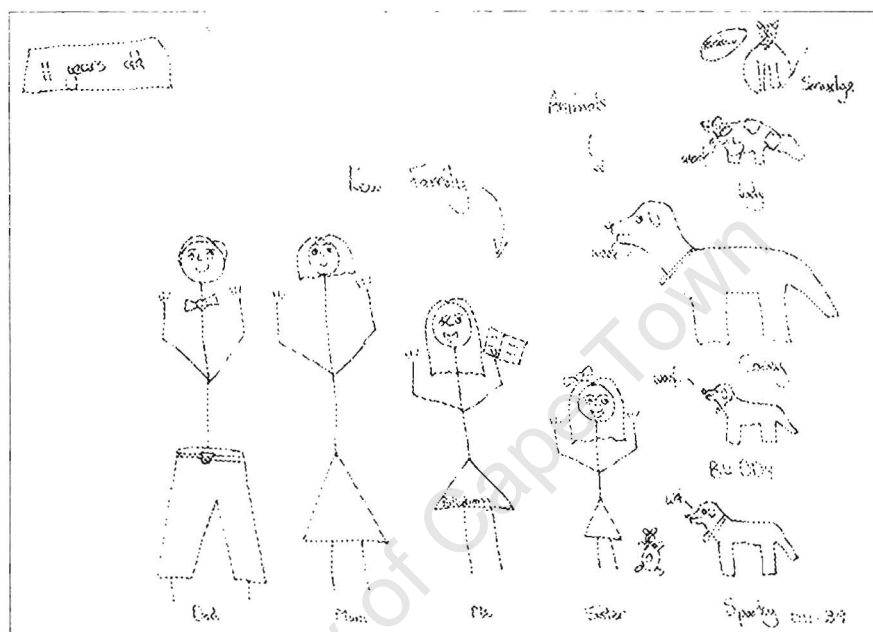
This does not yet indicate that the majority of these children are entering the Stage of Dawning Realism. Drawing A127 is an interesting example, as it shows clearly that this child is still relying on the repeated schema that was developed in the schematic stage.



A127

Drawing A124, shown overleaf, gives rise to some concern for the development of this child. She is still using schematic representation in her drawings, and her schema is very meagre. The upper bodies are represented simply by lines, as are the arms and hands. The heads are geometric circles, and the hair has been treated in the same way, with a difference for different genders.

Faces have been handled schematically, and the adult figures have single lines to indicate smiling mouths, while the two small girls have a geometric half moon.



A126

The trousers of the male are wide enough to indicate a body emerging from the waist, while the skirts of the females are not. The figures appear to float in space, although there might be a beginning of a base line indication, as the figures lower themselves to the edge of the page. The legs for the human are shown as lines, and there is no evidence of feet.

As an interesting contrast, this child has a fairly well-developed schema for animals. This could indicate that strong bonds with animals have deepened the understanding of their body parts, One of the dogs has a

coat decoration, while the humans are not wearing clothing on their upper bodies.

3a. Exceptions to the Schematic *Constant Schema of Body Parts*

32% of these children did not show a schematic answer for body parts. This suggests that more eleven-year-olds are attempting this than ten-year-olds, where only 12% are beginning to explore and experiment with unique solutions.

3b. Schematic Adherence to Descriptor

Only 68% of the children made use of a schema for body parts, whereas in the ten-year-old sample, this figure was 88%. In the eleven-year-old sample, there was more exploration with realism.

Drawing A115, shown overleaf, is an example of a very meagre eleven-year-old sample. This child has a schema for faces that is the most basic choice.

Her rendering of hands shows a lack of understanding of their purpose. They resemble the kinds of drawings that six- or seven-year-old children might use. Males are dressed in one way, and females in another. The

only additional detail to the drawing is a ball, but the legs that have been depicted could never kick it!



4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

44% of the children in this sample no longer used geometric shapes for their figures, showing an increase from the ten-year-old 24%.

4b. Schematic Adherence to Descriptor

Only 56% of the children in the eleven-year-old sample used geometric shapes to draw the human body, while 76% of the ten-year-old sample revealed this aspect. This is a significant increase.

5a. Exceptions to the Schematic Inclusion of the Base Line, whether real or implied, a Skyline and/or Environmental Features

In this interesting development, only 11% of this sample did not make use of this descriptor, a *lower* figure than the ten-year-old group, where 20% was recorded.

5b. Schematic Adherence to Descriptor

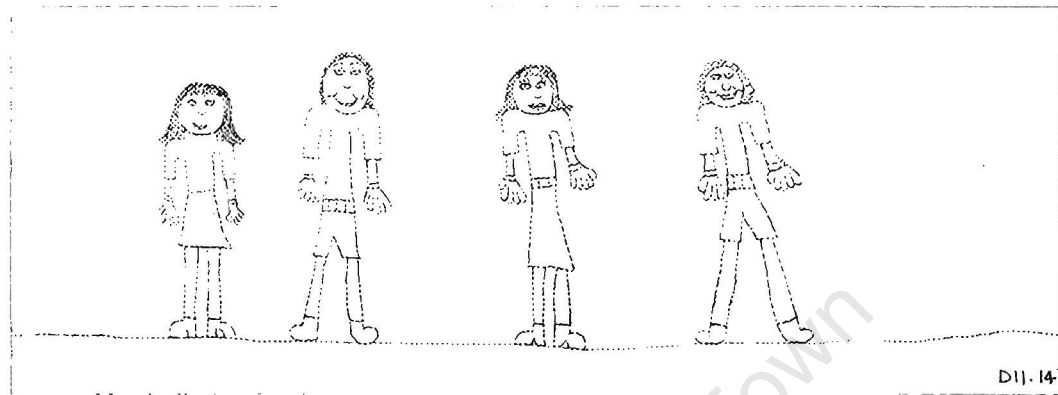
The eleven-year-old percentage is higher than the ten-year-old sample, being 89% as opposed to 80%. This does not necessarily indicate a backward movement, or a slump in development. One of the descriptors for the Stage of Dawning Realism is the inclusion of more detail.

Some of the 'environmental features' described by Lowenfeld in the Schematic Stage could thus become the 'greater detail' similarly described in the Stage of Dawning Realism. This will be further explored when this sample is compared to the descriptors for the Stage of Dawning Realism.

In drawing A119, shown overleaf, the child is clearly still in the Schematic Stage, with a repetitive schema, image repetition, and body parts constructed largely of geometric parts.

This drawing is included in this high percentage because this child has drawn a clear base line on which the figures are all standing.

There is very little additional detail, and the plane has not yet entered the child's spatial concept.



A119

In drawing A130, shown overleaf, a base line and environmental features have been included, and so it is included in this percentage for the Schematic Stage. However, the rendering has moved beyond schematic representation.

This child, who has entered the Stage of Dawning Realism, has made use of some detailed and unique interpretations in the rendering of the environment surrounding these two figures.

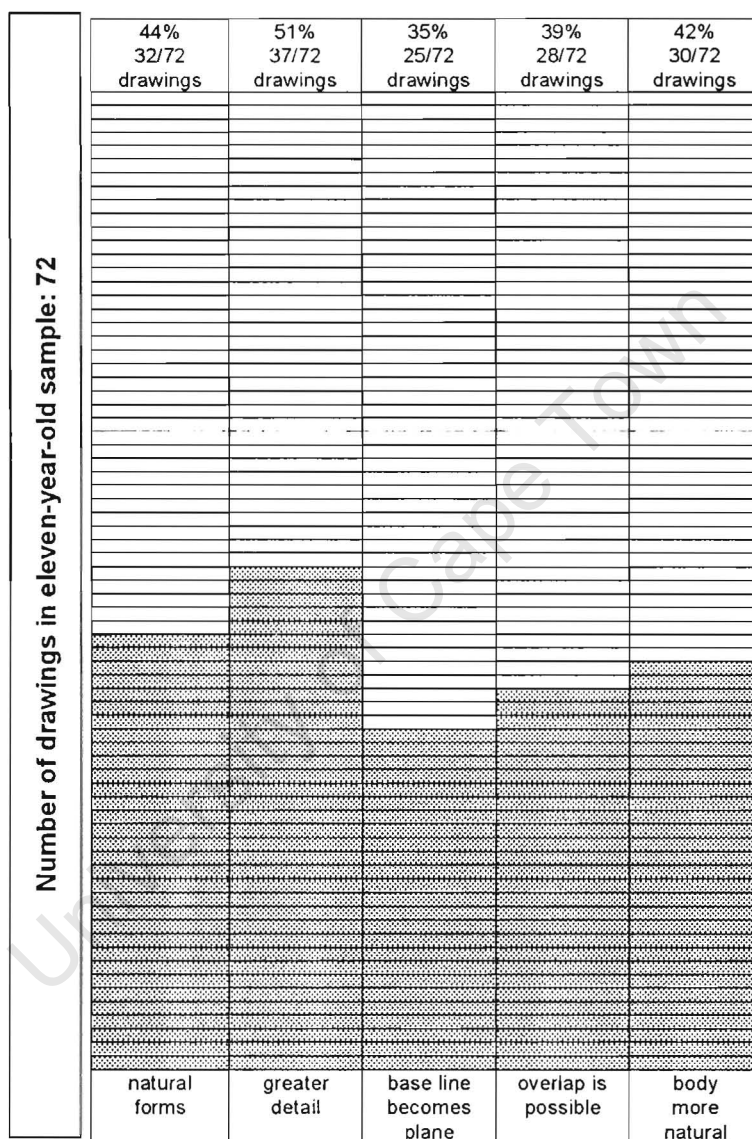
She has a clear understanding of space, of height and depth, and of the fact that figures who are further away tend to look smaller. Further indicators of the Stage of Dawning Realism are the more realistic interpretations of the human

form, where individual solutions have been applied, and the absence of geometric forms.



A130

The eleven-year-old sample is checked against the indicators for the Stage of Dawning Realism.



Graph showing percentages of adherence by eleven-year-old children to Stage of Dawning Realism descriptors

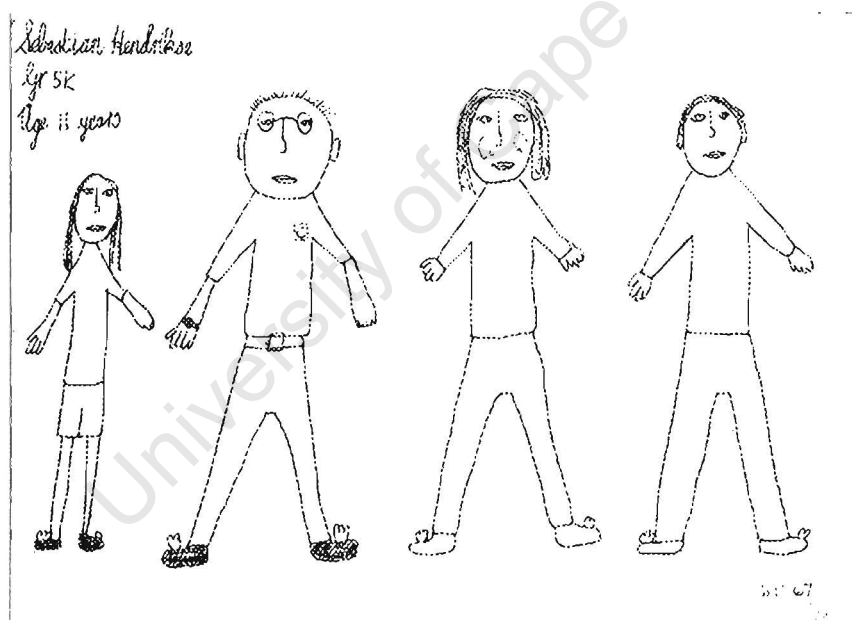
There appeared to be a definite movement towards some of the aspects of the Stage of Dawning Realism. However, it is not significant enough to

state that these children have moved completely away from the Schematic Stage, and are now employing the descriptors of the following stage.

Adherence to the Descriptors of the Stage of Dawning Realism

1. More Natural Shapes

44% of this group are making forms that are more natural than geometric, as opposed to the 24% of the ten-year-old sample. This is a fairly significant development, but as the figure remains below 50%, the majority of these children are still making use of geometric shapes.



A137

In this drawing, this eleven-year-old child reveals a strong adherence to the Schematic Stage, which she should have started to leave behind two

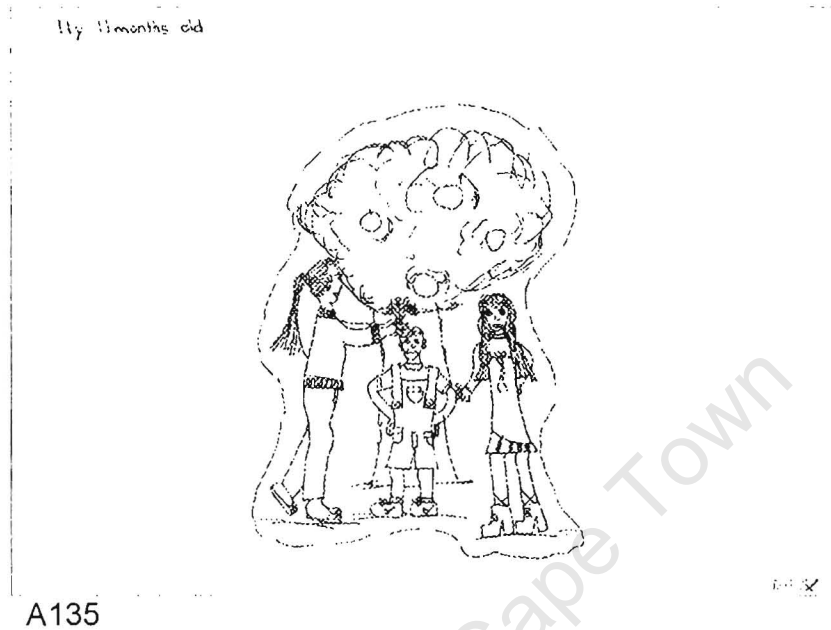
years ago. The figures are rigid, and strongly geometric. The schema is repeated. The base line is clearly in evidence.

In sharp contrast, we have drawing A116, made by a child of the same age.



A116

In this drawing it can be seen that the child has moved away from the rigid geometry of the Schematic Stage, and is using natural forms for the bodies of the people. The hands form part of the arms, and are rendered individually, depending on their action. The shoulders slope from the necks, and the figures are generally more individual and realistic. The human forms have moved far away enough from the schema to be able to perform individual actions.

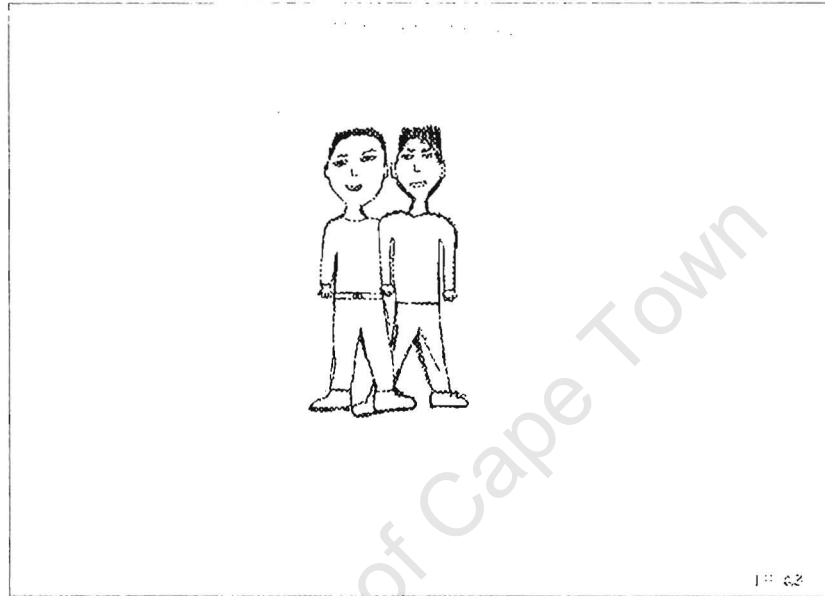


The move towards a more realistic rendering of the human form can be found in this drawing. There is an attempt to reveal the natural shape of the body beneath the clothing, as can be seen in the knee-shape of the figure on the left. The bodies can be manipulated to perform tasks, and to show action and attitude.

2. More Detail

51% of the children in the eleven-year-old sample made use of greater detail in their drawings, as opposed to 57% in the ten-year-old sample. In this area, the eleven-year-old drawings appeared to include more meagre details, even although the rendering of the bodies was clearly moving towards, or already described by, the Stage of Dawning Realism.

Drawing A136 includes the more natural form for the human body, but the drawing remains stark, with no further details added than the belt on the left-hand figure.



A136

This boy has an understanding of shallow space, as can be seen in the overlapping of the legs, but has not yet added detail to his work. The figures remain unadorned, the clothing in its simplest rendering.

3. Introduction of the Plane

The eleven-year-old sample also shows a generally more meagre understanding of space than the ten-year-old sample. Only 35% of the eleven-year-old drawings displayed a move away from a single base line towards a plane. In the ten-year-old sample, this descriptor scored 45%. A 10% difference could have been expected between these two age groups,

but it would have been expected that the higher percentage falls into the eleven-year-old group, and not into the ten-year-old group. This seems to indicate a lack of spatial understanding, which will be further explored in the twelve-year-old sample.

4. Overlapping

39% of these children made use of overlapping in their drawings, compared to 34% in the ten-year-old sample. This is in keeping with the developing understanding of the concepts of 'in front of' and 'behind'. Overlapping is also part of a developing spatial concept. In the previous descriptor, which describes deep space, the eleven-year-old group shows a lag behind the ten-year-old group. Drawing A128 displays fairly complicated grouping and overlapping, which shows a developed understanding of space in some aspects. There is no use of the space of the plain.



A128

However, this child has drawn very small figures, grouping them all on the bottom left-hand side of the page, and leaving most of the space on the page open. There are no details, apart from a row of buttons on the left figure's trousers, and a rudimentary belt on the middle child. The only area of this drawing that shows any real attention to detail is the pair of shoes that the front male is wearing. Careful scrutiny reveals a deep understanding on the part of the artist, of the form and shape of these kinds of shoes, and of how they fit onto the foot.

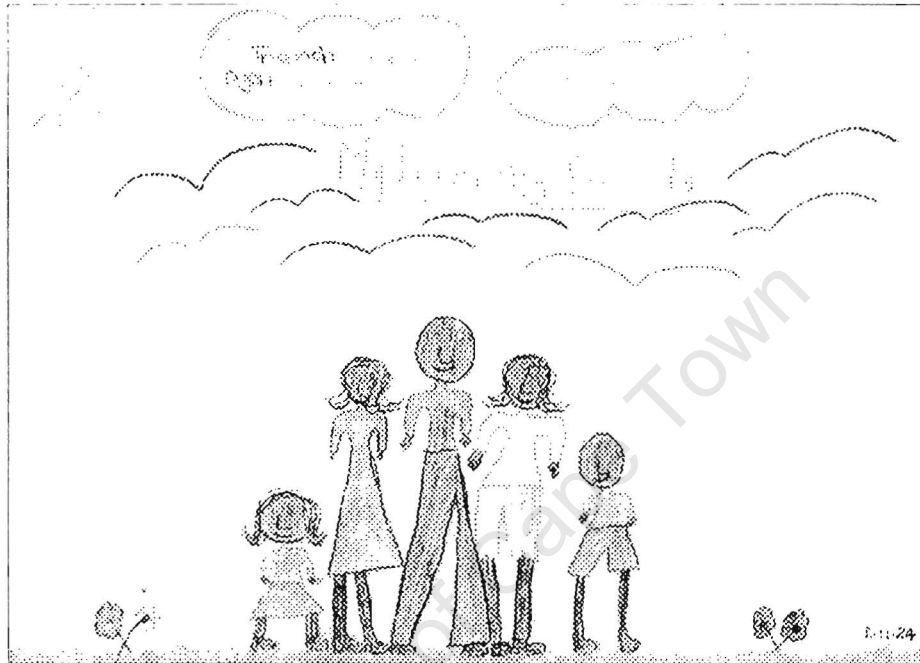
In drawing A120, we find a very good example of overlapping, with a group of human forms being clustered together in four rows.



A120

The kneeling figure in the front overlaps three other figures, and shows this child's developing understanding of space.

In drawing A121, we find a rendering that displays no developing understanding of space. The figures are placed firmly on the base line, and there is no evidence of overlapping.



A121

The figure that is second from the right, and may represent the mother, has a leg that is drawn close against the leg of the central 'father', and follows the shape of 'father's' leg, rather than overlap, and go behind or in front of it.

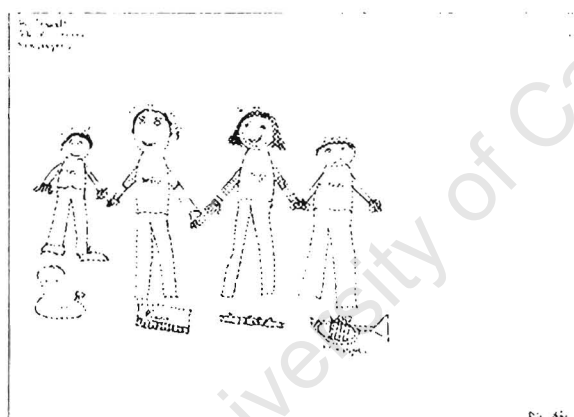
5. Bodies more natural

In 42% of the eleven-year-old sample, we find a repeated use of the facial schema, while the body of the human being becomes more natural. This figure is significantly lower in the ten-year-old group, (24%). This indicates that the eleven-year-old group is moving more strongly towards the Stage

of Dawning Realism in this aspect, although there is not significant evidence to suggest that the majority of these children have reached this stage, and have left the Schematic Stage behind them.

Conclusions on the Eleven-Year-Old Sample

In many of the eleven-year-old drawings, there is a disturbing lag in the expected development, as can be seen in the samples below.



A124



A118

These drawings appear to lack an environmental awareness, a deepening experience of the lived world, and a lack of concern for detail. This kind of drawing should have been left behind in the early Stages of the Schematic Stage, and should not still be in evidence at the age of eleven.

In the general sample, there is a marked approach to the Stage of Dawning Realism, although in the descriptors of more natural forms, overlapping, and a plane replacing a base line, there is a lag.

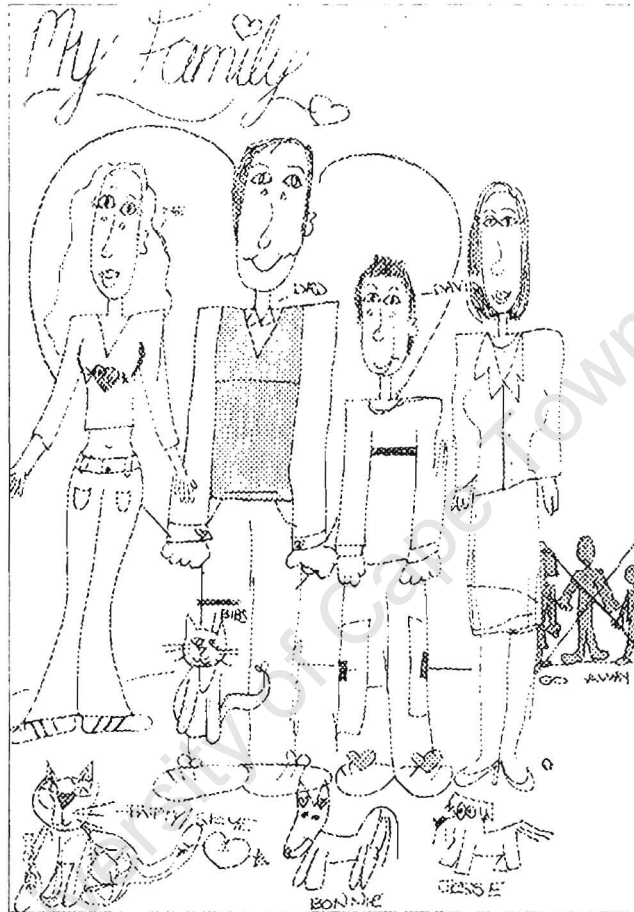
In each aspect of the Schematic Stage, the majority of these children are still significantly showing an adherence to these descriptors.

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The Twelve-Year-Old Sample

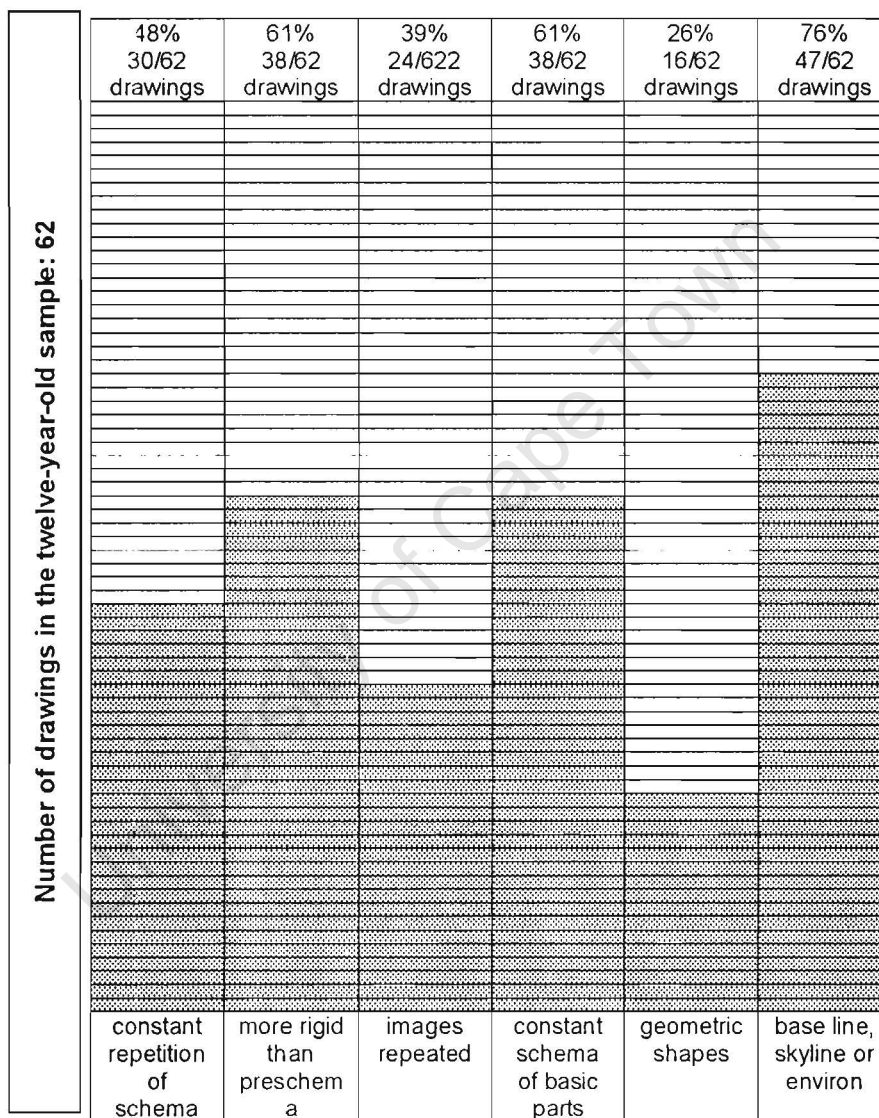
62 drawings



A162

This is a fairly typical example of a twelve-year-old drawing. The child has moved the base line up to the horizon, and there is so much detail in the drawing that it is visually distracting. There is evidence of overlapping, and each figure is handled individually, although the facial schema has remained constant.

To ascertain whether these children were indeed beginning to move into the Stage of Dawning Realism, this sample was tested against the descriptors for the Schematic Stage.



Graph showing percentages of adherence by twelve-year-old children to the Schematic descriptors

These percentages seem to indicate that twelve-year-old children have moved into the Stage of Dawning Realism.

1a. Exceptions to the Schematic *Constant Repetition of Schema*

62% of these children are using individual interpretations

1b. Schematic Adherence to Descriptor

Only 38% of this sample is still using a repetition of schema.

2a. Exceptions to the Schematic *Repetition of Images*

61% of these children are no longer using the Schematic repetition of images.

2b. Schematic Adherence to Descriptor

Only 39% of these children are still relying on the repetition of images.

3a. Exceptions to the Schematic *Constant Schema of Body Parts*

This is a low percentage for this age group. Only 39% of these children have moved away from the constant schema for body parts.

3b. Schematic Adherence to Descriptor

61% of these twelve-year-olds are still using a constant schema to render their body parts. Drawing A151, pictured overleaf, is a good example of this. The child has included detail and action, and yet a clear schema is seen. Apart from the 'action' figure, all other bodies are rendered schematically.



A151

4a. Exceptions to the Schematic *Bodies drawn in Geometric Shapes*

74% of these children have started to use more natural shapes in their human forms.

4b. Schematic Adherence to Descriptor

Only 36% of these drawings still reveal a use of geometric forms for bodies.

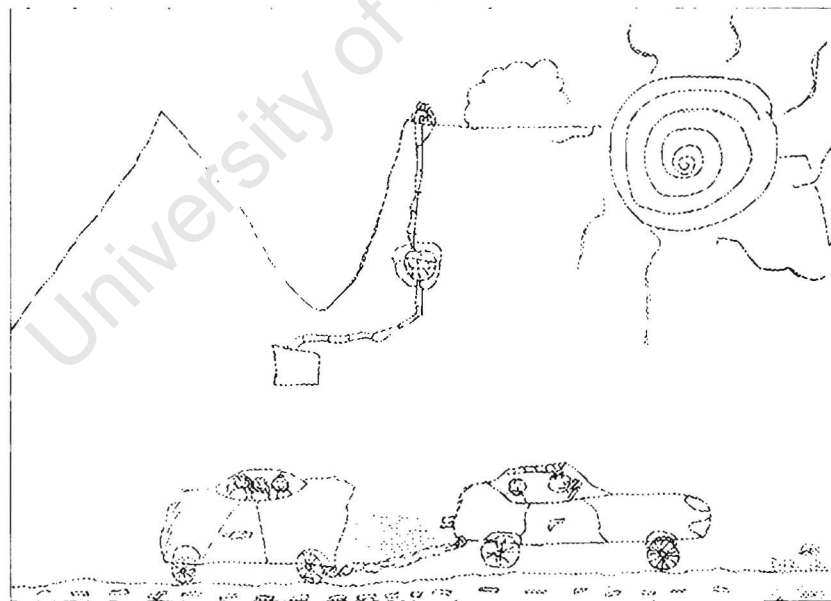
5a. Exceptions to the Schematic *Inclusion of the Base Line, whether real or implied, a Skyline and/or Environmental Features*

24% of these children no longer use elements from this descriptor. This is a significant result, as this figure should be much higher.

5b. Schematic Adherence to Descriptor

76% of the children in this sample are still using these elements. This finding relates strongly to the results of the eleven-year-old analysis, and will be discussed further in the conclusion to this age group. However, in the Stage of Dawning Realism, more detail is required in a drawing, and could have influenced this high response. Lowenfeld does not offer a clear distinction between the environmental detail of the Schematic Stage, and the additional detail of the Stage of Dawning Realism.

In drawing A146, there is clear environmental detail. The sun, mountains and a road are included.

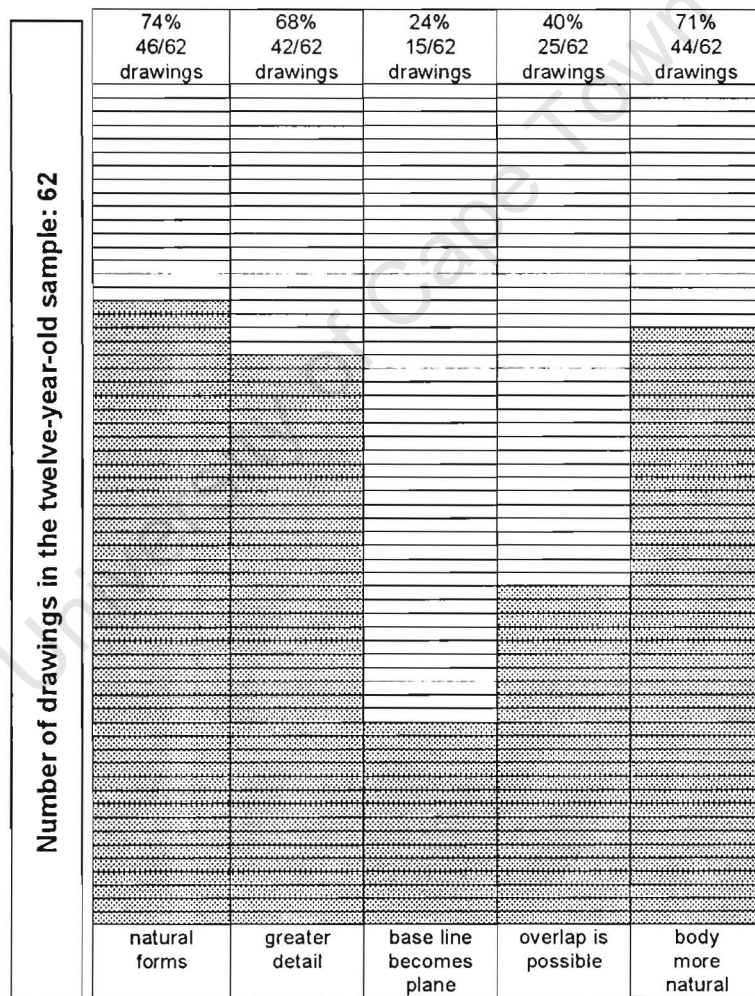


A146

It therefore fits the descriptor of the schematic stage. However, it also fits the descriptor for the Stage of Dawning Realism, as there is detail in the

addition of the cable car, the lines on the road, and the recognisable shape of Table Mountain.

Although there are still schematic drawings in this sample, they are beginning to be the exception rather than the rule. To verify this result, the sample was checked against the descriptors for the Stage of Dawning Realism.



Graph showing percentages of adherence by twelve year old children to the Stage of Dawning Realism descriptors

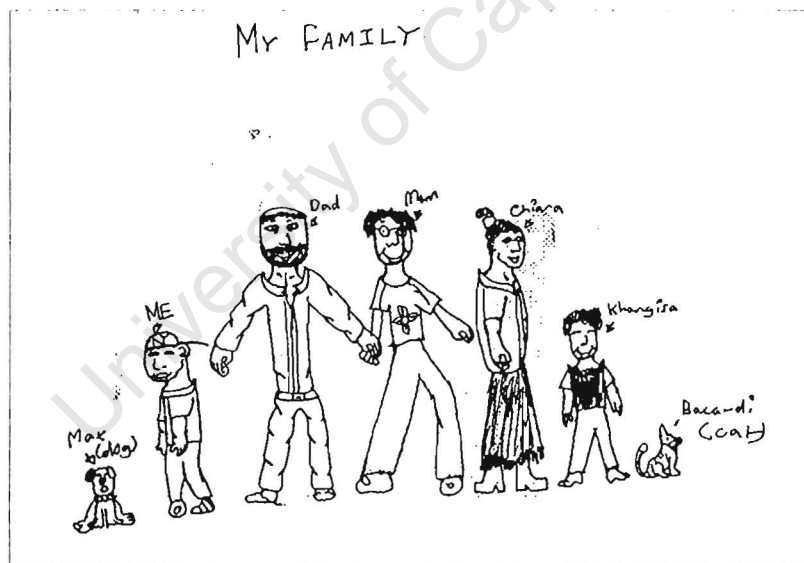
Adherence to the Descriptors of the Stage of Dawning Realism

1. *More Natural Shapes*

The movement towards natural in place of geometric forms has increased significantly, with 74% of this sample, as opposed to 44% of the eleven-year-old sample.

2. *More Detail*

68% of these children are making use of greater detail in their drawings, compared to 51% in the eleven-year-old group. Drawing A154 provides a good example.

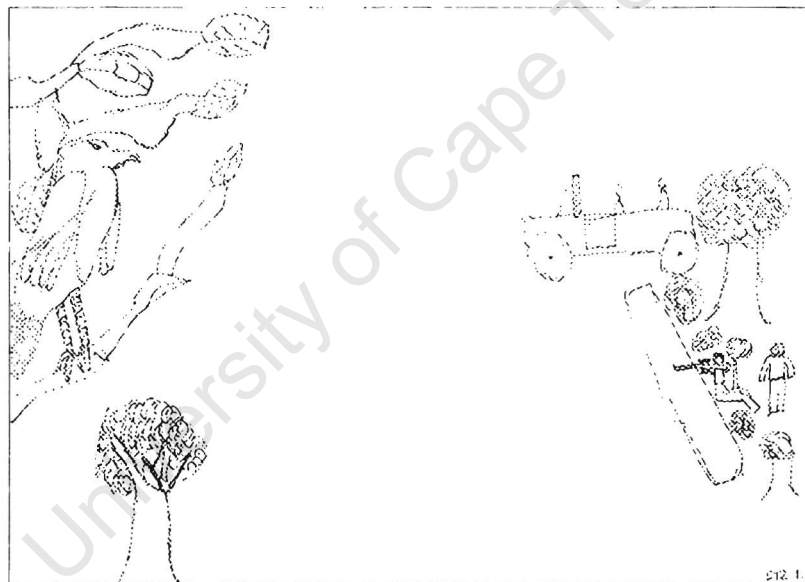


A154

Each human being is drawn in a unique manner, and the renderings include typical aspects of each person. The father has a beard. The mother wears spectacles. The boy on the left wears his cap backwards,

and has a body that is shown in profile. 'Chiara' wears her hair on top of her head, and 'Khangisa' is a smiling barefooted child. The detail that has been paid to the foot on the left is noteworthy. The animals also have been portrayed in individual and detailed renderings. All clothing is individual.

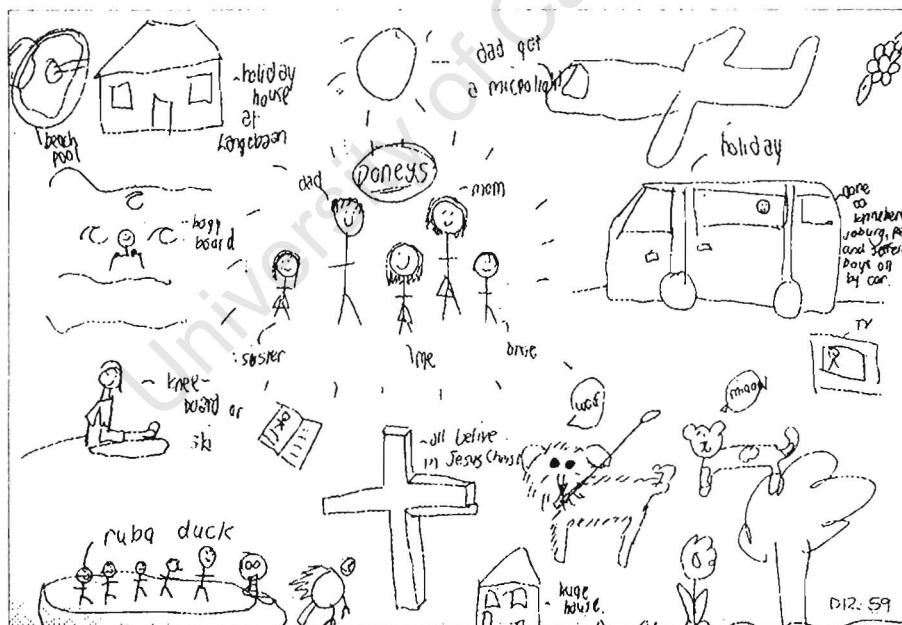
In drawing A140, although the figures are very elementary, there is a great concern for detail and space.



A140

The figures, some of them simply suggested by a few simple lines, are in the background, while the bird that is about to be shot, is in the foreground. More attention has been paid to the features of the bird, and the detail of the gun, than has been to the facial features and body parts of the human beings.

This drawing brings about an interesting question. This child has acquired the spatial awareness of which Lowenfeld speaks when he describes the Stage of Dawning Realism, and yet the figures are drawn in a manner that suggests that the child is still in the early stages of the Schematic Stage. It seems that it is possible for one child to embrace aspects from two or more stages at the same time, and in fact to retain these aspects throughout the natural process of development, until he or she stops drawing for the sake of enjoyment. Another example of this overlap of stages is drawing A165.



A165

In this drawing, the child's concern for detail has far outweighed the actual drawing. The family is shown in rudimentary form in the centre of the page, with stick figures completing the request to draw a family. Geometric

triangles indicate the female members of the group. The rest of the page is filled with details of the family life. We are afforded an intimate glimpse of the family's beliefs, possessions, leisure and holiday activities. This child's concern for detail has far outweighed the aesthetic considerations of the drawing. However, there are areas, like the vehicle, where an obvious understanding for shape is demonstrated. Although the humans have not been given hands, feet or any distinguishing features, the vehicle has tyres, windows, and even handles on the doors. This adds further weight to the question of children overlapping stages, and making use of aspects of two or more apparently conflicting descriptors in a single drawing.

3. Introduction of the Plane

The trend in the area of the lack understanding of space that began to emerge in the eleven year old sample is continued and underlined in the twelve year old sample. In the ten year old group, 45% of the children show a movement away from a single base line towards a plane. In the eleven year old sample, this figure drops to 35%. In the twelve year old sample, a further drop to 24% is recorded.

4. Overlapping

In the area of overlapping, the ten year old children display examples of this concept in 34% of their work, the eleven year old children showed

39%, and the twelve year old sample shows 40%. These figures are generally low for children who are beginning to explore a world that is more real, as the Stage of Dawning Realism suggests. Although it is not the purpose of this research, it would be interesting to conduct further study in this area, to try to establish the reasons for this decline in the spatial awareness of children as they grow older.

5. Bodies more natural

In the twelve year old sample, 71% of the children are making their forms more natural, while retaining the facial schema. They are interpreting the bodies of their figures in more individual ways. This can be seen in drawing A141, where the gender of the figure on the left hand side is indicated by the addition of basic breasts.



A141

The male figure has a complicated arrangement of collar and tie at the neck, and sports buttons, a belt and a walking stick.

In drawing A144, we once again find an example of this movement towards a more natural rendering of the figures, while the facial schema



A144

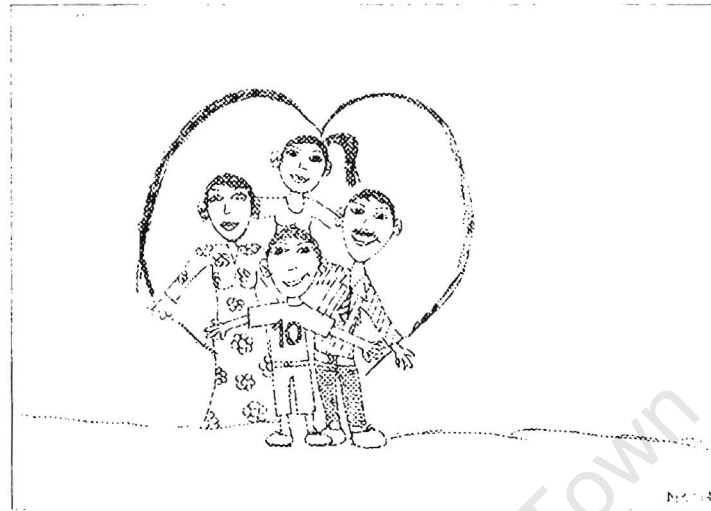
remains intact. The central parent figures are drawn wearing conservative clothing, with individual buttons, belts and shoes. The 'mother' figure has a decorated skirt, and a flower on her chest. The two children are dressed in more trendy clothing, with different shoes. Pockets form a detail.

In the eleven year old sample, only 42% of the children were able to do this.

Conclusions on the Twelve-Year-Old Sample

These findings suggest that generally, twelve-year-old children have moved into the Stage of Dawning Realism, with the exception of their understanding and awareness of space. This is the first age group where one can say this conclusively, and represents a lag of up to three years from the Lowenfeld research.

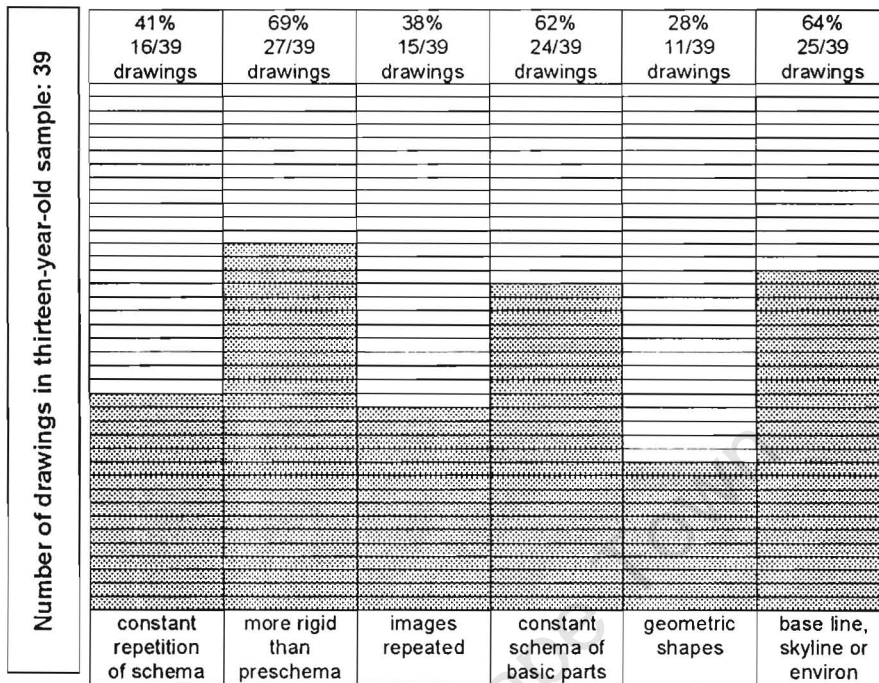
The Thirteen-Year-Old Sample: 39 drawings.



A175

This is a fairly typical example of a thirteen-year-old drawing. Overlapping takes place, and there is an awareness of the figure in space. Figures are handled with detailed attention, and individual characteristics are portrayed.

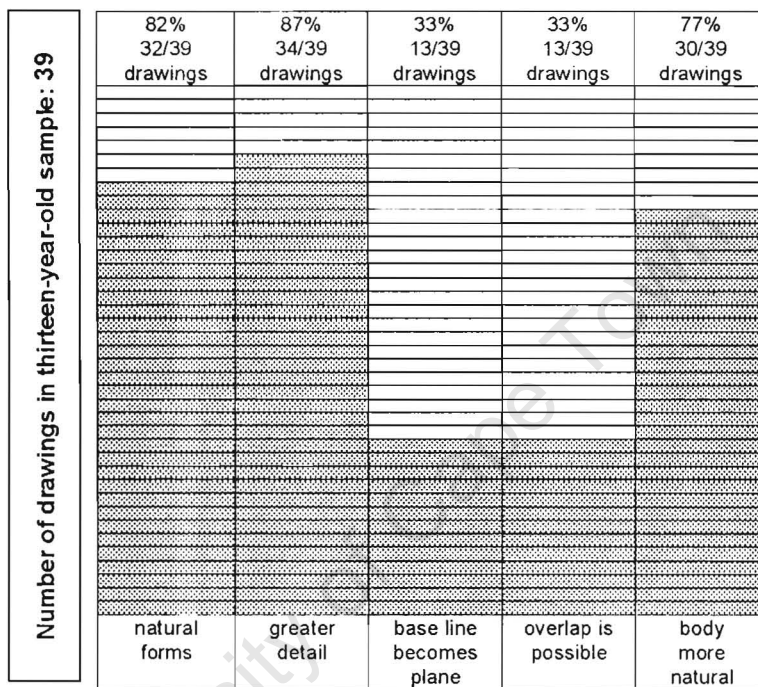
Although I had originally intended to examine the thirteen year old sample against the Stage of Dawning Realism, I decided to test them against the Schematic Stage as well. It appears that some children carry aspects of this stage with them, as they develop other drawing skills, and I thought it would be interesting to ascertain how many children are still using schematic methods of rendering, even although this may be in certain aspects only.



Graph showing percentages of adherence by thirteen year old children to the Schematic descriptors

These findings appear to confirm the trend displayed in the twelve-year-old sample. In the most important aspects, the percentages are either lower or similar to within one percent.

The thirteen-year-old sample was tested against the descriptors for the Stage of Dawning Realism to conclude that they had made a significant shift into the Stage of Dawning Realism.



Graph showing percentages of adherence by thirteen-year-old children to Stage of Dawning Realism descriptors

These findings support the theory that the majority of these children have entered the Stage of Dawning Realism. Once again, there is a further decline in the two descriptors that deal with space. The large majority of these children are generally using more natural forms and greater detail in their drawings, and the bodies have come to be drawn with more natural shapes, rather than geometric.

CHAPTER FOUR

AN OVERVIEW OF THE FINDINGS

Before embarking on an overview of these findings, it is important to restate the purpose of this research. Lowenfeld plotted these stages of development with their descriptors in 1947, and in the ten editions of *Creative and Mental Growth*, neither the descriptors nor the ages of the stages were changed.

My purpose in completing this research was to establish whether the ages of children entering these stages have changed, and to establish the effect that this would have on the training of primary school art teachers. Where an acceleration or a retardation has occurred, I have not sought to establish reasons.

The findings of this research, which is confined to a relatively small sample, suggest that children are entering the Schematic Stage at the age of six. By the time they are seven, their use of these descriptors is firmly established. Intriguing facts begin to emerge. Instead of this developmental acceleration continuing, children appear to stay in the Schematic Stage for a much longer time, emerging only at the age of twelve, and firmly entrenching themselves in the Stage of Dawning Realism at the age of thirteen.

Children do still, however, appear to move through the basic progression of the developmental stages, although the ages may vary enormously. There are also more exceptions than there should be.

Significant findings are that children are already in the Schematic Stage at six, and that they display characteristics of this stage until they are about twelve, and do not progress at nine, as Lowenfeld suggested. Another result of some significance is that children seem to develop a retardation of their spatial concept at approximately ten years old. They are also not displaying characteristics of the Stage of Dawning Realism until around the age of nine.

One's professional curiosity is piqued. Why are children entering the Schematic Stage at an accelerated age? Why is this acceleration not carried through to the Stage of Dawning Realism? What is the reason that children who should be in the Stage of Dawning Realism show such a retardation in their spatial concept? What is it in the experiential living of our children today that has brought about these changes, and how are they manifesting themselves in other areas? Are small children more aware of their surroundings than the children who lived fifty years ago? Are older children less aware of the space that they live in? Does this retardation in the spatial concept show itself in ball skills, in sporting

activities, and in the way that children move through and understand space in their daily lives?

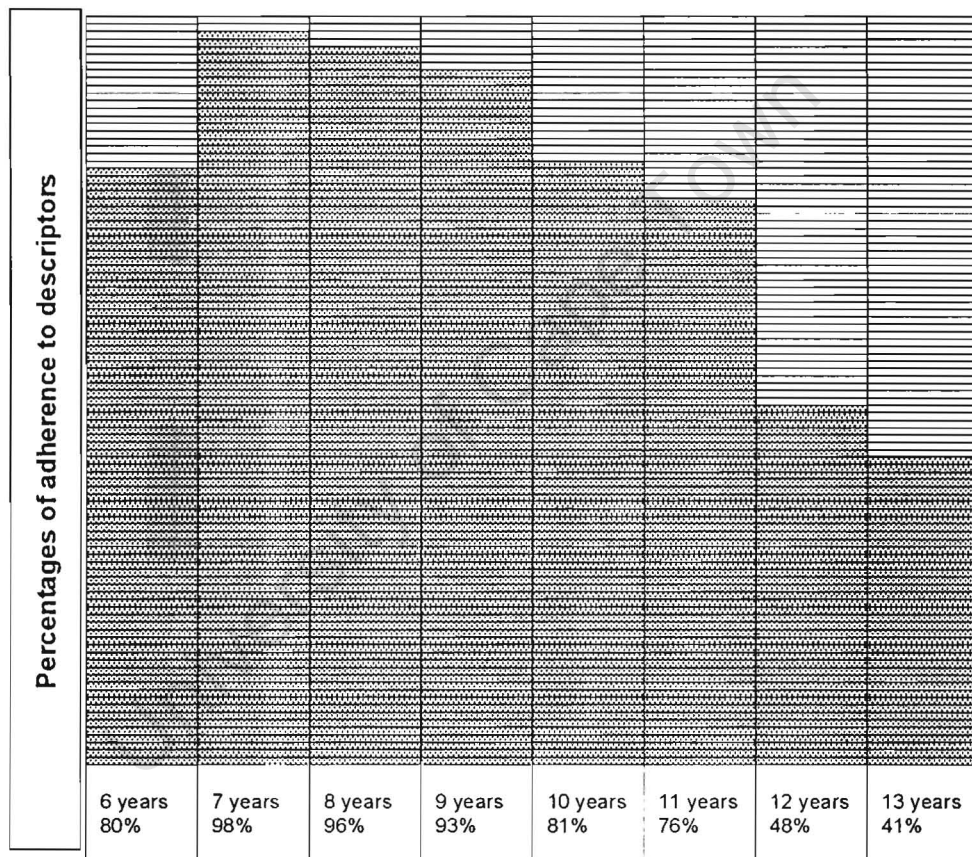
Speculative ideas as to the reasons for these changes are significant and complex, and will be provided later. They suggest an important springboard for further research.

In order to obtain an overall view of the development of this sample group of children, each descriptor was compared across the age groups.

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**THE SIGNIFICANT DESCRIPTORS
FOR THE SCHEMATIC STAGE OF DEVELOPMENT**

1. CONSTANT REPETITION OF SCHEMA



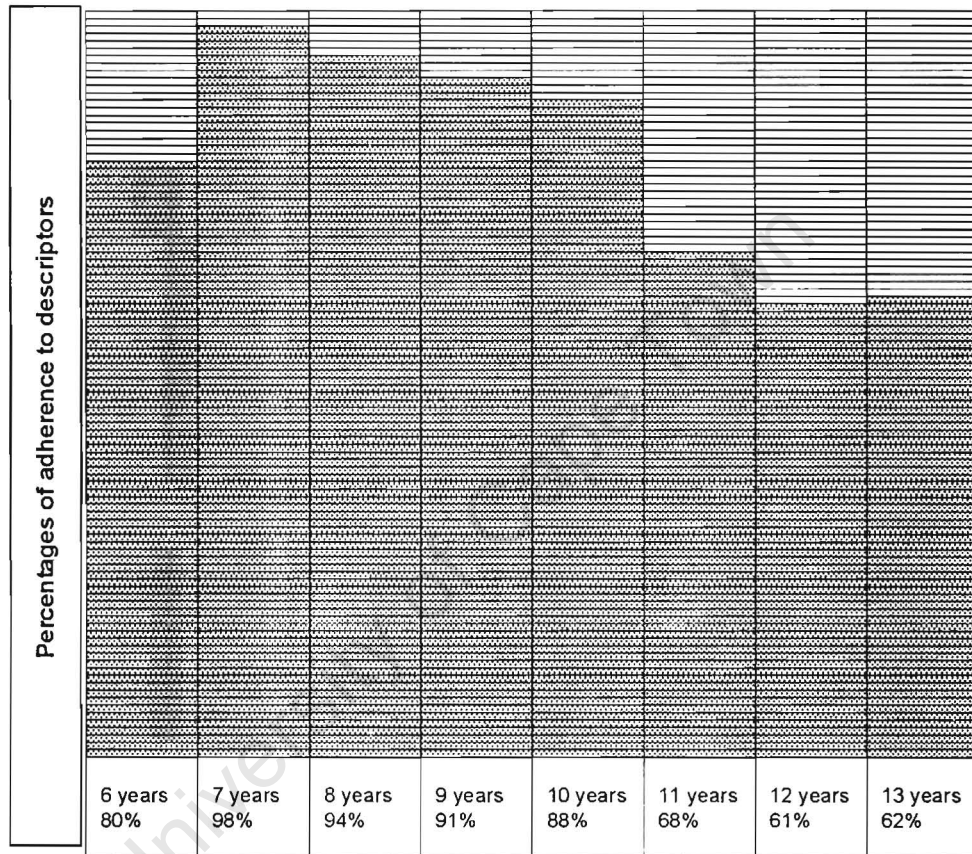
The constant repetition of schema appears to peak at the age of seven, jumping from 80% in the six-year-old sample to 98% in the seven-year-old sample. This should begin to taper off by the age of nine, as the child prepares to enter the Stage of Dawning Realism. However, in this group, a

significant number of children in the eleven-year old sample (76%) are still making use of a constant repetition of schema. This indicates that the development from this stage is being retarded, as these children have not yet abandoned this tradition of the Schematic Stage.

This percentage drops significantly to 48% in the twelve-year-old group, and to an even lower 41% in the thirteen-year-old group. This figure is still high, when Lowenfeld suggests that children of this age should have moved way beyond the descriptors of the Schematic Stage by the time they begin to enter puberty.

Although there is a delay in the age of the children forsaking the descriptors of the Schematic Stage, the line of the graph shows an appropriate decline as children grow older. It does, however, indicate a lag in progression into the Stage of Dawning Realism.

2. THE SCHEMA OF BODY PARTS REMAINS CONSTANT



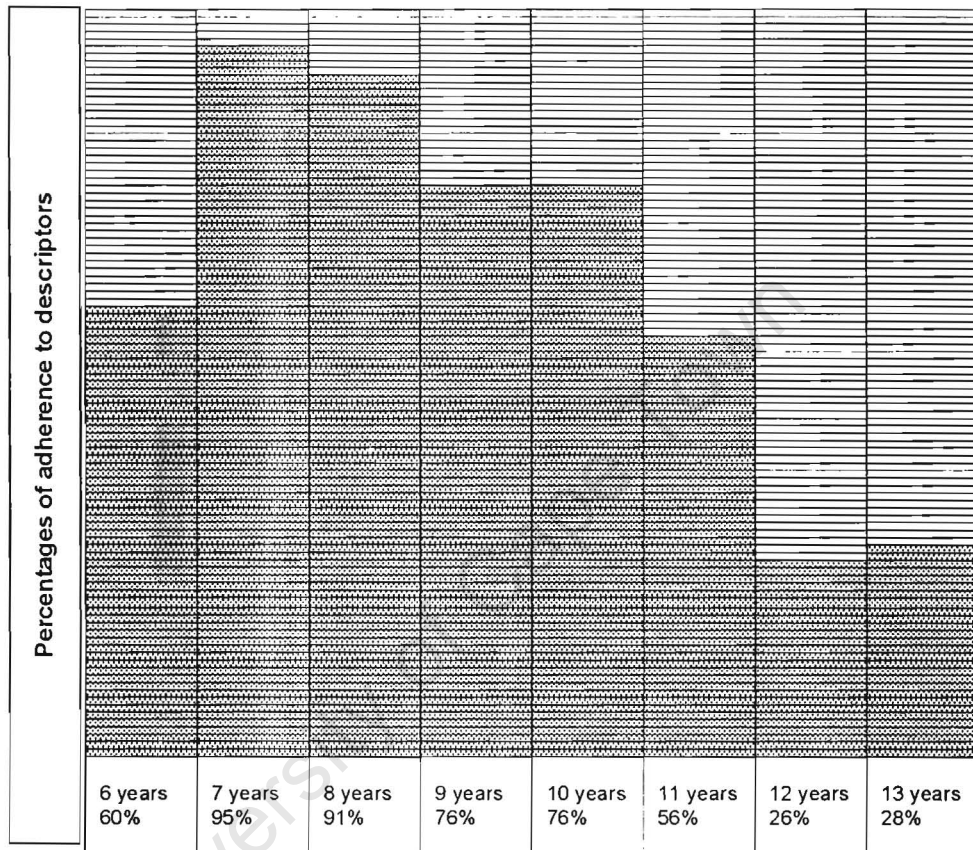
Once again, this figure peaks at the age of seven, which indicates the highest level of the Schematic Stage. Children of this age should only be entering the Schematic Stage, but from the age of seven the percentage remains high until ten years of age, (88%) and then significantly, falling to 68% in the eleven-year-old group. By the age of thirteen years, a significant number of this sample group (62%) is still making use of a

constant schema of body parts. From the age of eight, a rapid descent should result in a much lower percentage in the twelve-year-old schema, when children should be firmly within the parameters of the Stage of Dawning Realism.

This raises a question about the child's awareness of the body, and of energetic movement. One is prompted to ask about the way that this awareness is being addressed in schools. This lag may well be connected to the retardation of the spatial perception, which is revealed in later discussion.

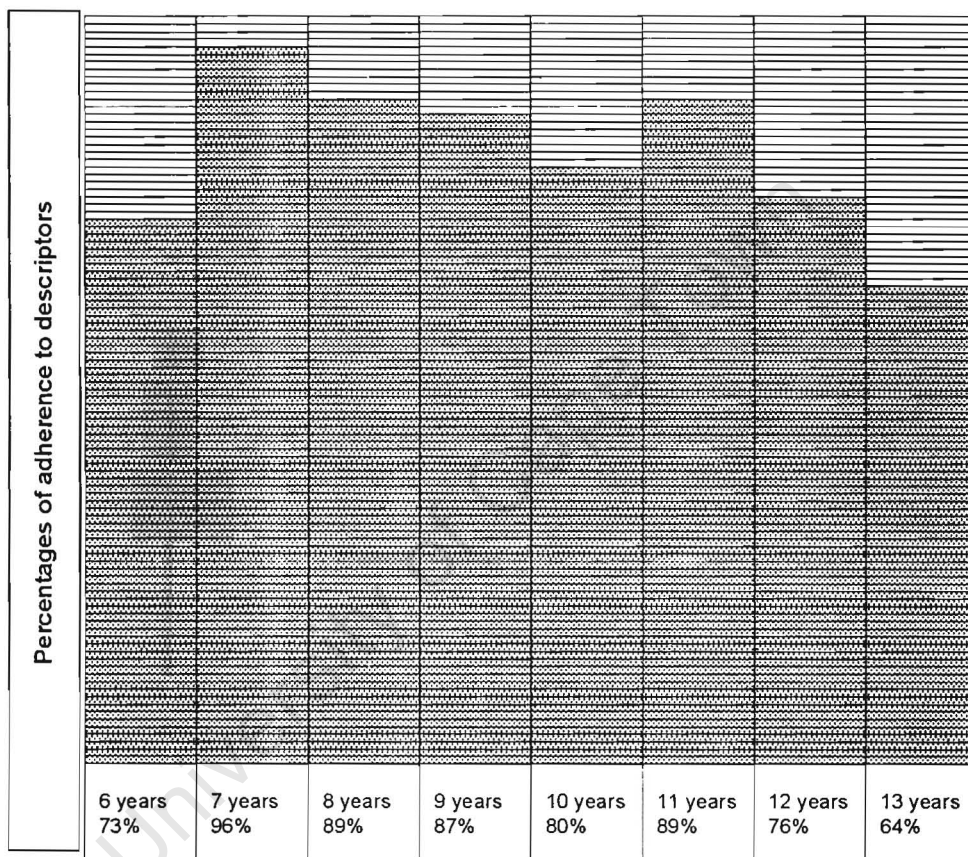
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3. THE BODY IS CONSTRUCTED OF GEOMETRIC SHAPES



In the third criterion, the seven-year-old sample is the strongest at 90%. This figure remains high until the age of eleven, when it drops to 56%. This appears to indicate that, instead of starting at the age of nine, there is a shift in the way a child draws at the age of eleven. At the ages of twelve and thirteen, this figure remains appropriately low.

4. INCLUSION OF BASE LINE, SKYLINE OR ENVIRONMENTAL DETAILS



The percentage for this descriptor once again peaks at the age of seven years, which seems to underline that this age is the highest point for the Schematic Stage. More than half of the children throughout this sample, despite their ages, used a fair amount of detail in the renderings. In the Schematic Stage, the inclusion of a rudimentary tree or a cloud could be considered 'environmental detail'. In the Stage of Dawning Realism, this

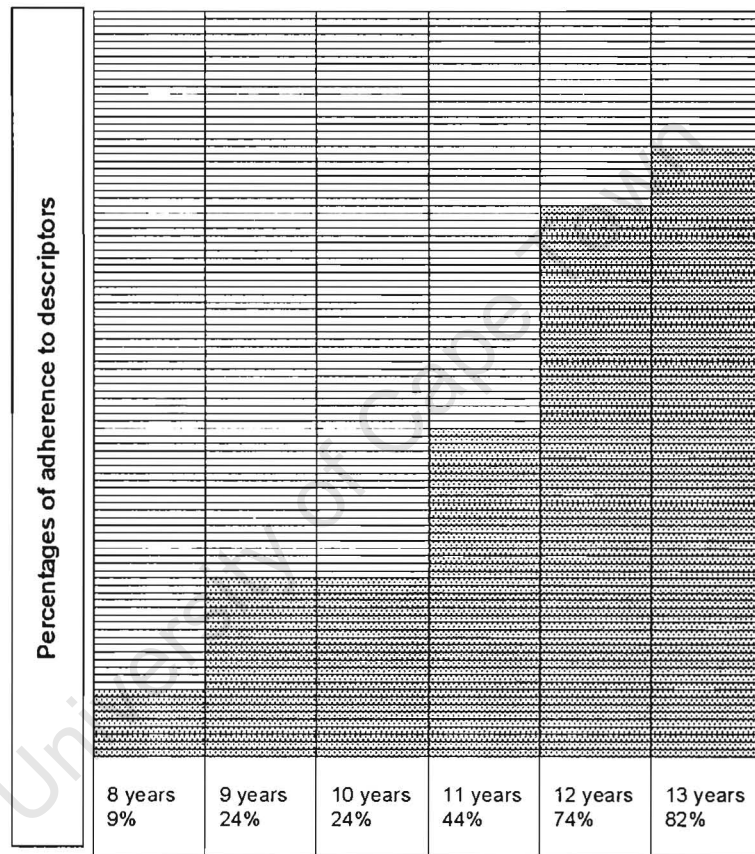
could be considered greater detail. This aspect proved difficult to define with any degree of accuracy.

This graph deals with the spatial awareness of children, and it is of great significance that the base line is not disappearing, as it should be, around the age of nine. The curve of this graph displays no real development. Children should be developing a deeper awareness of space as they approach the Stage of Dawning Realism, but this graph seems to indicate that, from the ages of seven through to twelve, their spatial awareness stays fairly constant. This is a dramatic departure from the theory of Lowenfeld.

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**THE SIGNIFICANT DESCRIPTORS
FOR THE STAGE OF DAWNING REALISM**

**1. GEOMETRIC SHAPES ARE DISCARDED IN FAVOUR OF
NATURAL SHAPES**

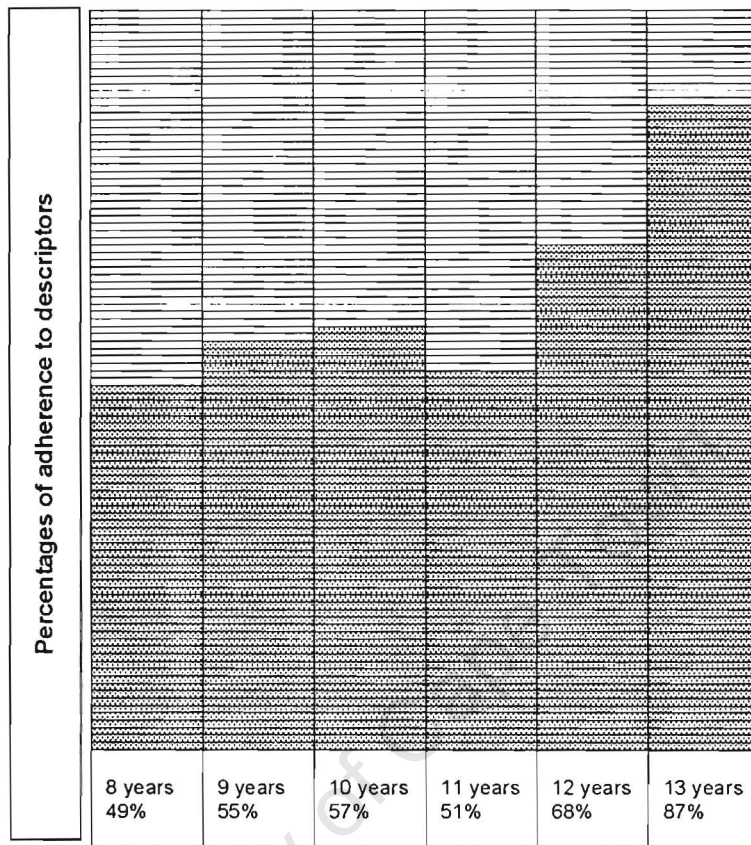


The use of natural shapes in the rendering of a human being peaked at thirteen years in this sample. This is one of the important elements of the Stage of Dawning Realism, and so should be included in drawings between the ages of nine and twelve. Only 24% of the nine-year-old sample has moved away from the use of geometric shapes, and this

percentage is repeated in the ten year old group. This indicates very clearly that these children are still making use of this aspect of the Schematic Stage geometric shapes as they draw human beings. Even at the age of eleven, only 44% of the children have abandoned the rigidity of geometry in favour of the more natural shapes of the Stage of Dawning Realism. The figure rises very sharply to 74% in the twelve-year-old sample, and further, to 82% in the thirteen-year-old sample.

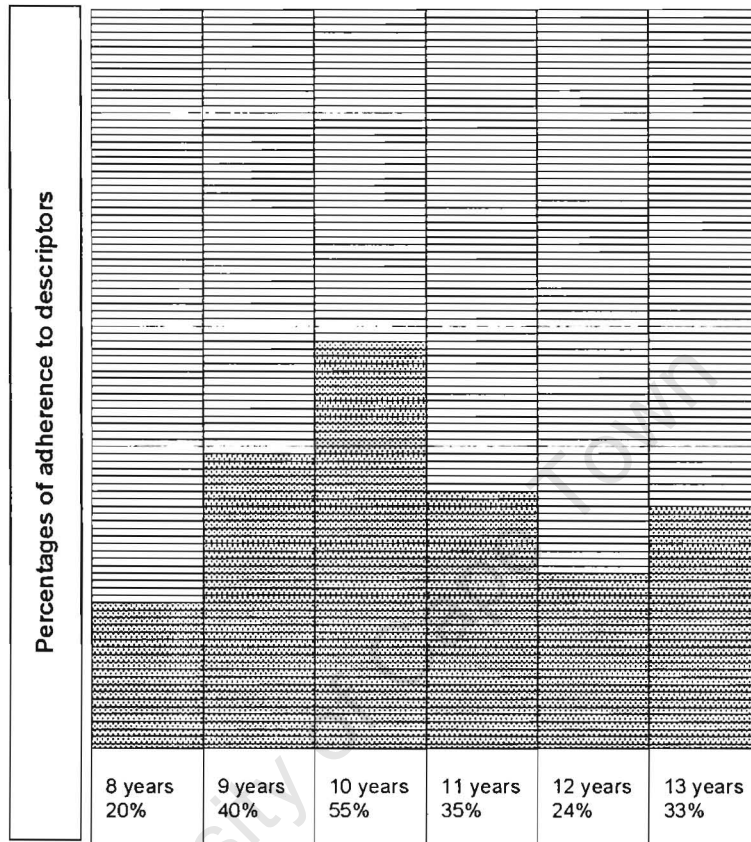
This graph echoes the findings of the graph showing that the schema for the geometric construction of body parts in the Schematic Stage, and endorses the fact that the children in this schema do not appear to have a developing awareness of their bodies as natural, functioning and active organisms.

2. GREATER DETAIL IS USED IN THE DRAWING



This percentage remains fairly static until the age of eleven, and then rises from the age of twelve through to the thirteen, where it peaks. The plateau until the age of eleven is fairly significant. This seems to suggest that children's drawings are not becoming enriched by the variety and detail that should be a part of a developing awareness.

3. THE SINGLE BASE LINE BECOMES A PLANE



This descriptor reveals some important facts. The curve of this graph is not in keeping with the Lowenfeld Stages of Creative Development. It should rise regularly from the age of eight to the age of thirteen.

This incline is visible up to the age of ten, where 55% of the children in this sample have moved away from the use of the base line, and are making use of the plane. However, at the age of eleven, this figure drops sharply,

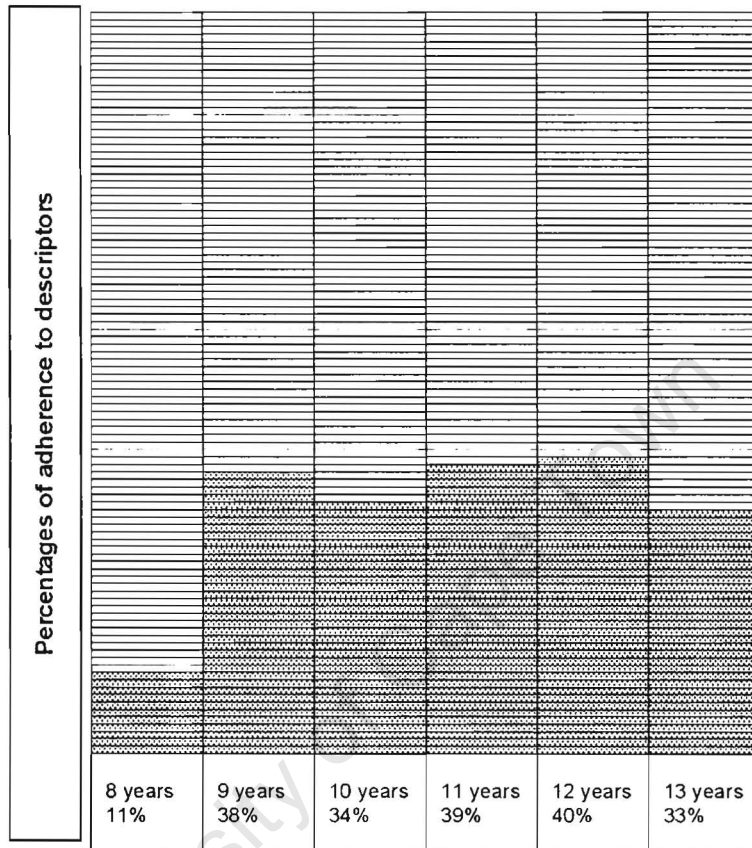
and only 35% of the sample shows an understanding of this spatial concept. The figure remains fairly static until the age of thirteen.

These findings suggest that after the age of ten, children are beginning to show retardation in their awareness of space. This raises concern, because the spatial concept does not remain constant, but appears to regress after the age of ten, where Lowenfeld suggests that it should expand and develop.

By the age of nine, a transitional age between the Schematic Stage and the Stage of Dawning Realism, the sample group shows that only 40% of the children have moved away from the use of the base line. According to Lowenfeld, children by the age of twelve years should be firmly within the parameters of the Stage of Dawning Realism, but in this sample, only 24% of this age group showed an understanding of space that is similar to the one described by Lowenfeld.

This stagnation is significant and serious.

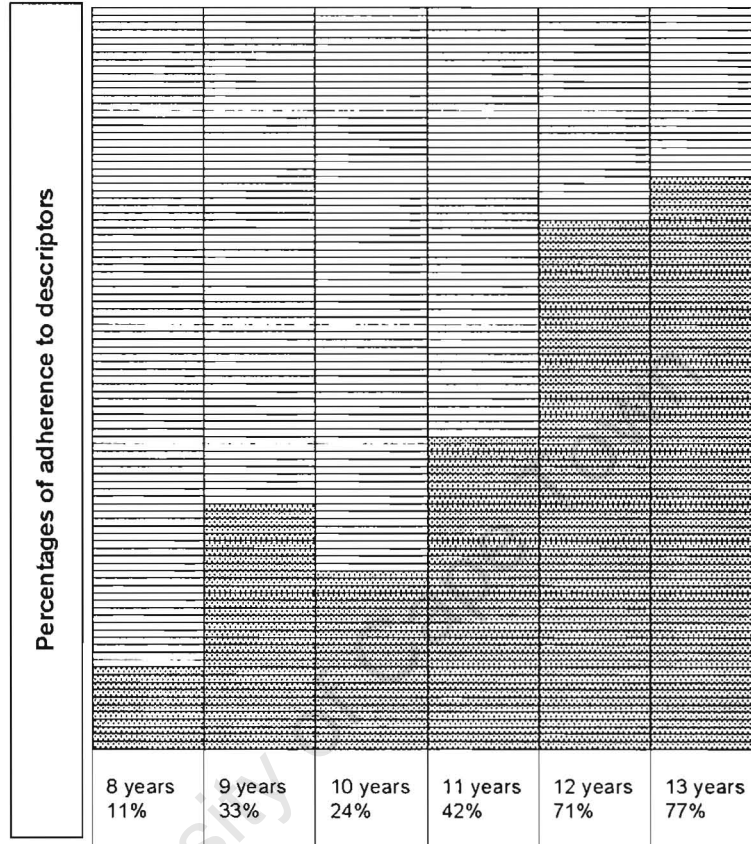
4. OVERLAPPING IS USED



This descriptor once again deals with a spatial awareness and three-dimensional space, and seems to relate very strongly to the previous findings, where children appear to show a lack of understanding of space, and kept their figures positioned along a base line, instead of moving them into a plane.

Between the ages of nine and thirteen, the differences between the numbers of children who made use of overlapping are insignificant.

**5. FACIAL SCHEMA MAY REMAIN,
BUT BODY BECOMES MORE NATURAL.**



Apart from the drop in the ten-year-old sample, which is not significant, this descriptor seems to increase systematically as children grow older and develop. This appears to be in general keeping with the general Lowenfeld theory, although he suggests that children between the ages of nine and twelve should already be employing a more natural shape to their bodies. The percentage rises sharply but naturally from 42% at eleven years to 71% at twelve.

GENERAL OVERVIEW

When one looks at the overview of this research, it appears to indicate that it is no longer possible to categorise the art-making of children into such clearly defined developmental stages. Lowenfeld's work can no longer be applied rigidly to the training of art teachers, although reference will always be made to the fact that he was a significant educator, who formed the basis for further research into the developing awareness of children, and how it may be revealed through their art-making.

There are two key differences that need to be addressed. The first deals with the fact that children are entering the Schematic Stage at an earlier age, but that their progression does not proceed through to the early entry, or even the recognised entry age into the Stage of Dawning Realism. This lag needs to be addressed by well-informed art educators, and in fact should impact on the learning in all areas of the curriculum.

The second key difference is in the area of spatial development, where a serious lag is in evidence. Children appear to be much less aware of the body in space, of three dimensions, and of deep space. This is an important lifeskill, and the development and understanding needs to be addressed urgently. This is not a matter of enhancing the drawing skills of children. It is what is *revealed* in these drawings that is important, and the implications have deep consequences. Children who lack well-developed

spatial concepts are at risk as they move through the world, interact with the environment, and survive the dangers of modern society. If they are not encouraged, through carefully planned activities and thoughtful facilitation, to be more aware of the positions of their bodies in space, their experiences of their worlds will continue to lack an awareness of spatial relationships. Their lives, already impoverished, could become endangered. If a child is not able to judge the distance or the speed of an approaching vehicle, or the depth of water, if a child cannot estimate the height of a jump from a tree, they are at risk.

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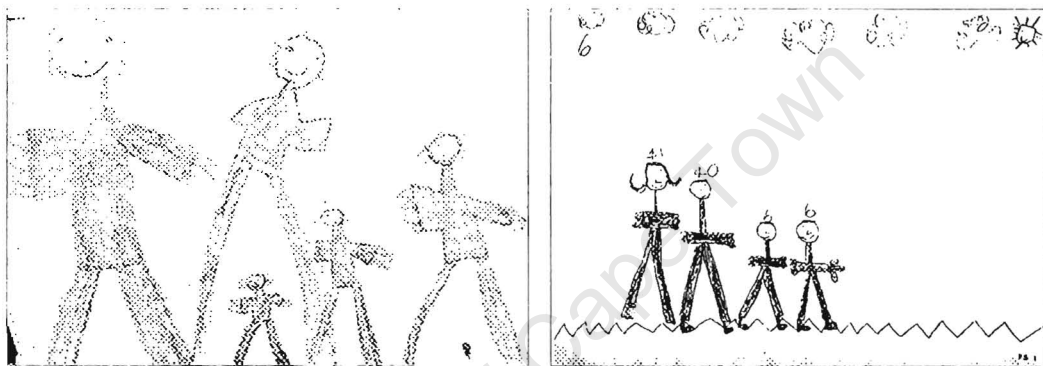
CHAPTER FIVE

CONCLUSIONS AND IMPLICATIONS

Art teachers in the primary school owe much to Lowenfeld's work. He strengthened the notion that the art-making of children is much more about process than product, and offered a guide for the kinds of learning that occurs during each stage of the child's creative development. Teachers were able to recognise, in the work of their learners, elements that suggested the stage that the children were passing through, and by referring to Lowenfeld's work as a guide, were able to plan sequential art lessons that developed and extended the child's experiential learning of the world.

After carefully comparing and analysing the samples, it appears that it is no longer possible to plot a linear developmental pathway through which all children travel in their creative development. Six-year-old children from this sample have advanced into the schematic stage ahead of the age definition that Lowenfeld offers. Using an example from Lowenfeld's book, and comparing it with a drawing from the sample group is a powerful illustration of this point.

The drawing on the left is from Lowenfeld's book, *Creative and Mental Growth*, and is used as an example of a drawing by a seven-year-old child who is entering the schematic stage. The drawing on the right is from the six-year-old sample. Note the striking similarities, despite the age difference.



After the age of six, there does not appear to be an easily established pattern in the sample group, apart from a very general one that includes aspects like the inclusion of more detail.



A19

This drawing, by a six-year-old child from the 2003 sample, shows a very clearly developed schema, while the human form has already evolved

beyond simple geometric shapes. The baseline and the skyline are in evidence, while attention has been paid to detail.

The clear descriptions that Lowenfeld offered as a guide for each age group, and the defined progressions that he plotted, appear to have become much more individual, as children explore and experience their worlds in their unique ways.

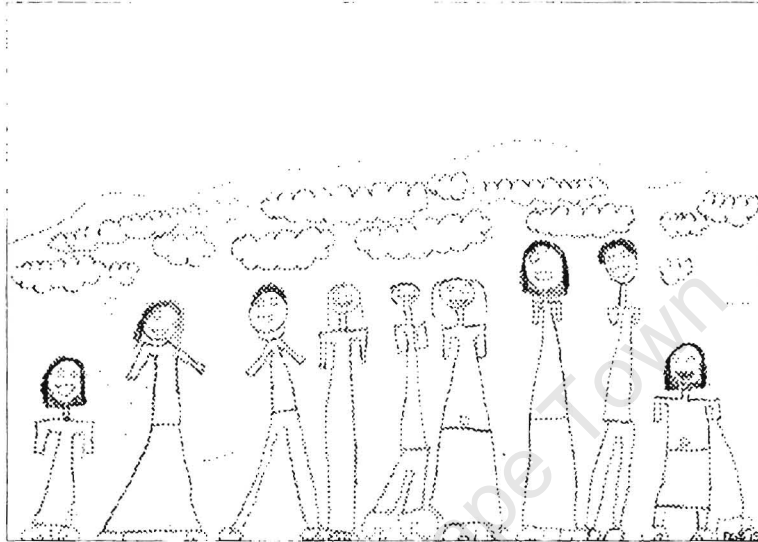


A17

In A17, a drawing by a seven-year-old child, we see great individual detail in the rendering of the clothes. The child is also unusually aware of shallow space, and has clearly indicated overlapping. However, her figures are all placed along an implied base line, and there is no evidence of the plane, the horizon, or deep space.

In the drawing overleaf, also by a seven-year-old child, the base line has moved up to become the horizon, and environmental detail has been included, showing an understanding of deep space. However, the schema for the figure reveals a strong geometric component, and no detail has

been added. These figures do not yet have hands or noses, but the child is already displaying an advanced awareness of deep space.

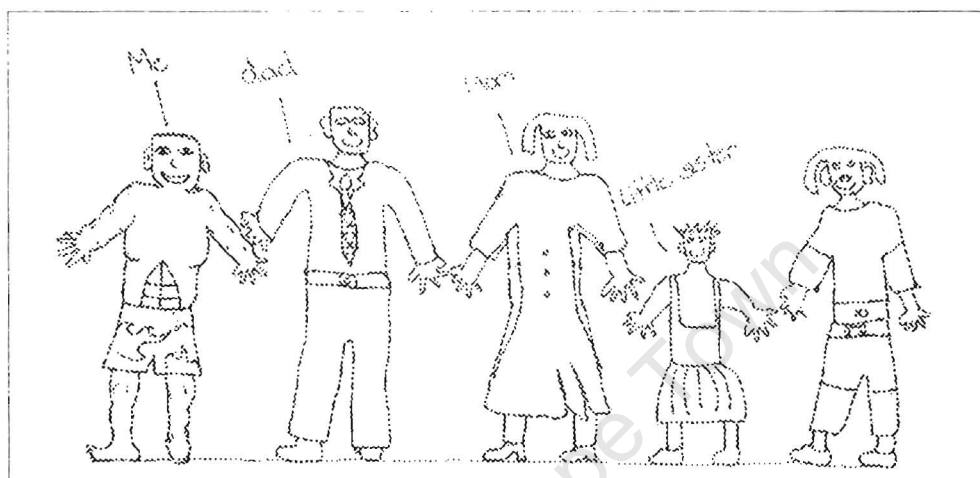


A118a

There is no doubt that the art-making of children is a direct response to their experience of the world around them, and as this experience has become various and different, so has their response become. In the sample collection, I have found evidence of children who make use of aspects of the Schematic Stage while at the same time employing aspects of the Stage of Dawning Realism.

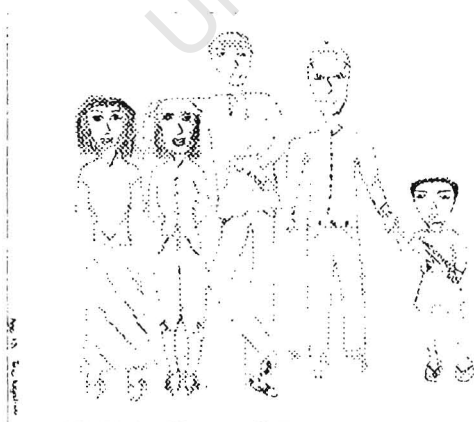
Some children make use of overlapping, showing an understanding of shallow space, use natural shapes in their human beings, and include great detail in their drawings, which are all descriptors of the Stage of

Dawning Realism. At the same time, however, they still place all of their figures along a base line, showing no developing understanding of deep space.



A153

In this example, drawn by a twelve-year-old child, the figures have been drawn with great detail, but they are all placed along a straight base line. There is also no inclusion of environmental detail, but attention has been paid to the details of the human beings that are illustrated.

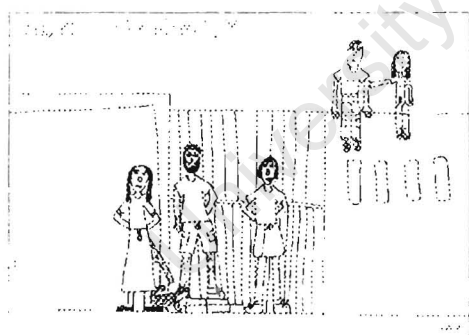


Another example of this base line adherence is A182, completed by a thirteen-year-old child.

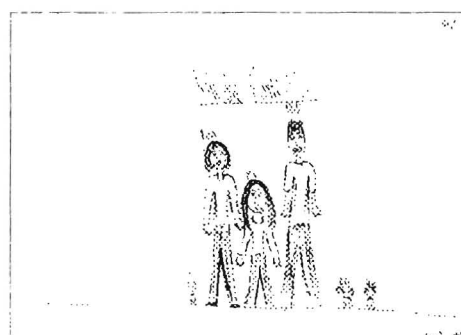
A182

Lowenfeld states (196) that 'the change from the single base line to the plane is a fairly rapid one,' and speculates that children discover this deeper space because of their heightened physical activity. The majority of the children in this sample have not yet started to draw the plane rather than the base line, and their figures remain standing in a straight line. This line regularly occurs along the bottom of the page.

This is an important finding in this research, as it differs significantly from the Lowenfeld sample. It reveals that the children in this sample are no longer exhibiting similar responses in their spatial environments, and are therefore offering a difference in their spatial depictions from the Lowenfeld sample.



A93



A156

This aspect should give rise to concern for all educators, whether in the arts field or not. Lowenfeld says (197) that the base line begins to disappear, and that trees and houses are no longer drawn along the edge

of this line. In the 2003 sample, the majority of the drawings in this age group still draw their figures and other images along a straight line.

Pickering (1971:50) says that pre-school children's drawings may incidentally reveal adult concepts of space, and that as the child's awareness of space becomes deeper, the drawn image will move from the base line to occupy the plane. Drawn objects will begin to relate to each other. The children in this sample group appear to have a limited and inferior understanding of space and spatial relationships. This appears to regress from about the age of ten. Lowenfeld suggests (196) that children begin to include more than one base line in their drawings, and that the space between these two base lines becomes filled in as children discover the plane. In the recent samples, a single base line is implied in the greater number of the drawings, and there is little evidence of a plane, or space between two base lines being filled.

In conclusion, the two significant differences which have emerged are the child's understanding of shallow space and spatial relationships, as may be perceived in the lack of overlapping, and the child's understanding of deep space, as may be seen in the relative absence of the depth of field in these drawings, where a base line is still largely preferred to the plane.

These hold important implications for art educators, as will be discussed later in this chapter.

As children absorb and understand their experiences, their individual explorations of their worlds result in individual, rather than generally similar, drawings. Although it may still be possible to find 'typical' Lowenfeld examples in each age group, these examples are the exception rather than the rule.

SPECULATIONS

It may have been possible for Lowenfeld to predict the stages of creative development of children in the mid twentieth century. In recent times, something has occurred in the lives of the children that has made them deviate from these stages, sometimes using some of the aspects, and sometimes using others. The drawings of these children differ significantly from the samples used by Lowenfeld. This is clearly an area that offers an exciting opportunity for further research. While it is not the purpose of this document to investigate these reasons, speculation as to their possible causes is offered.

The South African experience

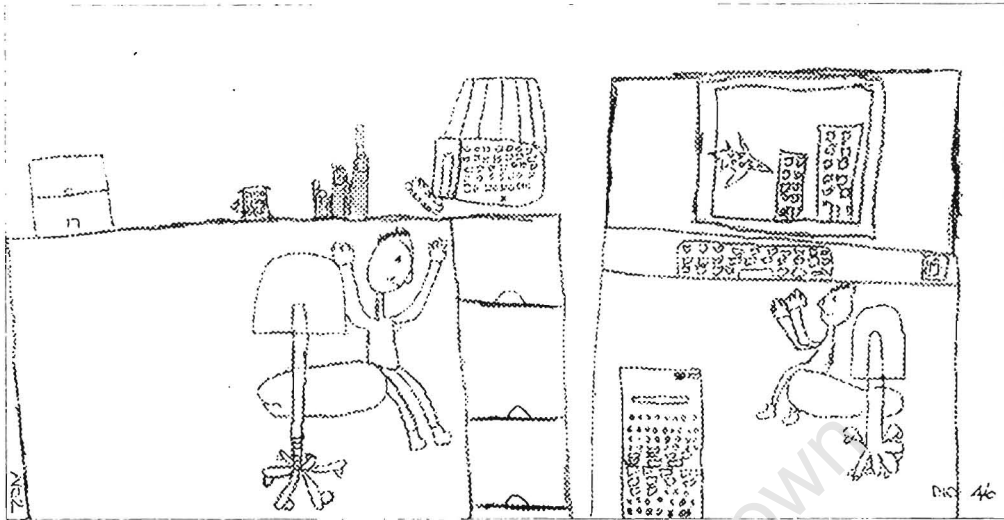
Lowenfeld states clearly that children's drawings are a direct response to their experiences of their worlds.

Each drawing reflects the feelings, the intellectual capacities, the physical development, the perceptual awareness, the creative involvement, the aesthetic tastes, and even the social development of the individual child." (Lowenfeld, 1970: 22)

These children of the twenty first century have experiences which Lowenfeld could not have imagined, and that he could not have predicted during his lifetime. They are as different and unique as the children themselves. Lowenfeld describes the typical leisure activities of children in the stage of Dawning Realism:

"Boys ignore girls, and girls despise boys. It is a time when boys go camping, belong to groups that have rules of their own, take great interest in group sports, build elaborate hideouts from boxes or stray pieces of lumber, and not infrequently lead wars against girls. Girls, on the other hand, begin to wear fancy dresses, enjoy parties, sit with their own group, watch a love movie, invent their own secret codes or languages, and not infrequently lead wars against boys of their own age, although often secretly admiring an older junior high school boy" (Lowenfeld, 1970: 191)

The typical leisure activities of children of this age in the twenty-first century are very different. They are discussed in some detail in the following pages, but may be glimpsed overleaf.



A102

1. The South African Experience: Technology

Modern technology has given children opportunities for learning that did not exist fifty years ago. The internet offers information at the touch of a few buttons; documentary programmes on television invite them to enjoy the sights and sounds of places, people and animals that would not usually be a part of their experiences. While technology offers much that is positive, it also has many negative aspects that should be carefully monitored.

Technology exposes children to a visual world of violence, intrigue and compulsive involvement. Watching television has come to be a standard pastime for many children. Editing produces visual frames that last on average of eight seconds before cutting to another shot from a different

angle. There is little time for the visual exploration of texture, detail and design. There is little depth of experience, little interaction with the people, the places or the animals. The environment is simply a background vision to a visual, non-imaginative and non-participative pastime. The viewer is afforded no active involvement, no real experience of space, and no thoughtful or aware response.

Computer games have become the favourite pastime of many children in this new world. They offer a one-dimensional mechanical involvement with no real encounter of space or colour.

Both the television set and the computer require that children sit still for the duration of the programme. Perhaps this robs them of the depth of experience of the natural environment. They do not taste, touch, feel, hear and smell their worlds any more. They simply observe a world that is happening to someone else in cyberspace. A pseudo-dimensionality is created on the computer screen, which offers an understanding of behind and in front of, but not of deep, real space. The children with whom Lowenfeld worked, and whose drawings provided the basis for his research, would have known little of the existence of such things, and their lives would not have been much affected by them.



A129

In recent times, television programmes and computer games have deeply influenced the drawing of children, as may be seen in the following example. This drawing, completed by an eleven-year-old boy, was handed in as a response to a request from the teacher to draw the family. He

has simply adopted the recipe for drawing that he has copied from the media. These children draw with no thought, and do not relate their drawings to their experiences, but rather produce them in response to the positive reinforcement from adults and peers.

A further example of this kind of drawing may be seen in A134, (appendix) where instead of drawing his family, this boy has made several drawings of Lara Croft, a popular cartoon character.

Lowenfeld himself predicted that technology would have an important impact on learning.

“(Man) is becoming a passive viewer of his culture, rather than an active maker of it. Football games are to be watched, not played. Music has become soothing background syrup in the shopping centre rather than a means of actual involvement. The television has become a mass means of distraction in which the viewer’s only involvement is that of turning the on or off switch. Even groceries come packed in their own sterile plastic containers, removed not only from touch but also from smell.” (Lowenfeld, 1970: 10)

2. The South African Experience: Behind Closed Doors

One of the causes of the inhibited understanding of space that is revealed in this sample may be that children are becoming more sedentary than in previous times. They admit to spending most of their afternoons and week ends in front of television sets or computer screens. Mrs Jenny Matthys, a parent of an intermediate phase child in a Cape Town school, declares that she would rather have her children safely in the home than out on the streets, which is a sad but accurate statement of the life of the child in modern South Africa. Too many children are placed at risk by the simple act of walking beyond the proverbial garden gate. Teachers (an informal survey was conducted amongst a group of my in-service teachers) confirm this attitude. Adults feel more secure knowing that their children are enclosed in the safety of small gardens, or even better, in the secure area of a locked home. At the same time, classrooms are much more crowded now than they used to be, with more than thirty-five children being crammed into rooms that were originally designed for twenty learners.

This is a personal observation after seven years of visiting schools in the Cape Peninsula as part of my role as an observing lecturer during my students' teaching practice. These factors must surely impact on the child's experience of space.

This lack of understanding and experience of space is eloquently portrayed in the drawings of the children in this sample, and may be seen in some of the examples that are included in this document. Up to the age of thirteen, the two descriptors that deal with space show significant results. There appears to be a slightly better understanding of the process of overlapping, and of putting one object in front of or behind another, but in the area of depth of field, the majority of these children have kept their figures firmly along a base line. This indicates a lack of understanding of deep space, of the three-dimensionality of their experiences, and of concepts like how near and how far. The influence of the flat cyberspace in which these children live has invaded their understandings of their world, and figures are placed *on* a base line instead of *in* space.

As the child's experience of space becomes more limited, so does his or her understanding of the movement of the body in space. Concepts like 'how near' or 'how far' become more difficult, and this has important implications for the personal safety of the child. Judging the distance of an approaching vehicle, or moving through traffic on a busy road is done with

less accuracy. The height and width of objects in space becomes problematic, and even the placement of the object in space is less easy to understand. A sports teacher at a middle class independent school admits that he finds children can no longer catch balls, aim for the goal posts, or estimate size or distance.

3. The South African Experience: The National Revised Curriculum

A final speculation that is offered could be the effects of the new curriculum that is currently being introduced into schools. This has been a slow introduction over the past five years, first with curriculum 2000, and then with the revised National Curriculum C2005. Visual art has been integrated into one Learning Area with drama, dance and music, and it is presumed that one generalist teacher is able to teach all of these disciplines.

This skills-based curriculum appears principally to aim at equipping young learners for work, and does not generally encourage deep sequential learning and scaffolded knowledge. The Arts and Culture Curriculum Statement contains organising principals that are underpinned by historical redress rather than by arts principles. In grade 5, the organising principle for learning outcome 4 requires that *'the learner will be able to use multiple resources to explore and communicate social, cultural and environmental issues through the arts'*. In grade 6, the organising principle

for the same outcome requires that *'the learner will be able to explore, express and communicate the meaning and form of various historical, social and cultural rituals or practices in South Africa'*.

In grade 7, a time when Lowenfeld suggests that the child should be experiencing the environment with a deeper awareness, the organising principle for learning outcome 1 requires that *'the learner will be able to develop the skills and knowledge to create and present artworks that explore human rights in South Africa'*.

I suggest, as a trainer of art teachers, that unless teachers are equipped with the subject specific specialist knowledge that will enable them to interpret this document in a meaningful and creative way, their learners will be deprived of the opportunity of true expressive arts education.

These activities should develop the child holistically, deepening the awareness and making more conscious the experience of living in the environment.

The unskilled application of a skills-based curriculum could be the single most important factor in bringing about the changes that have been recorded in the creative development of young children. This area needs

to be researched thoroughly so that the effects of this curriculum can be studied at a much deeper level than is possible in this dissertation.

Particular attention needs to be paid to the Intermediate Phase, as it is in this area that the lags in development seem to occur. In the Foundation Phase, where much attention is paid to spatial understanding, particularly in the field of numeracy literacy, children have advanced to enter the Schematic Stage early. The lag that has occurred in the expected progression occurs only once children are in the intermediate phase. The fact that there is no longer a course available anywhere in the Western Cape that offers specialist training for art teachers in this phase is significant.

IMPLICATIONS FOR ART TEACHERS

The implications of this finding are important for art teachers. In order to increase and develop the spatial awareness of children, particularly in the intermediate phase, art teachers should increase the number of practical projects which deal with spatial concepts like overlapping, depth of field development, and a broadening understanding of concepts like *above*, *below*, *beside*, *in front of*, *behind* and *next to*. Children should be encouraged to explore and imagine space in their drawings, so that their thinking once again involves the conscious experience of space. Three-

dimensional projects that deal with the object in space, and the object moving through space, should be applied with sensitivity and awareness.

At the same time, teachers need to be aware of the fact that children appear to be moving into the schematic stage at an earlier age. The implication here is that children from the age of six need to be encouraged to think of the body in space, and the body image of these children needs to be explored. Action and movement topics should be offered to these children, so that they are able to develop their body schema in the art room. The body needs to be considered as a climbing, running, moving, sitting, leaning, and even a falling organism. Planning for each topic should include a verb, to encourage a deeper understanding of the movement of the limbs, the head and the torso.

If these action topics are included in the Foundation Phase, and are developed into more complex concepts in the Intermediate Phase, then the child's awareness of space should deepen and extend with regular application. Mussen, Conger and Kagan (1969:166) state that the perception of depth starts during the child's first year, and so it would appear that the earlier a child is taught to explore space in a formal manner, the deeper the experience will be.

In the Intermediate Phase, concentration and attention to detail should be encouraged, so that children are guided into a deeper awareness of their worlds and their lived environments. Texture, pattern and design should be encouraged, and projects that offer a deeper insight into these elements should appear more frequently in the planning of the art teacher. Solomon (1993) says that Foundation Phase learners place no importance on spatial depth. Observation and experience of spatial relationships become important so that the child begins to gain a new understanding of space.

This lends strength to the argument that learners should be given more opportunities to explore and experience their worlds, and an increased opportunity for the experience of gross motor movements should be brought into the art room. Large sheets of paper will encourage an awareness of space in composition, and will give the opportunity for compositional development, as the understanding of the object in space is nurtured. Once again, three-dimensional projects will offer the prospect of directly and intimately working with the object in space, and children should be encouraged to be aware of the construction of spatial relationships as they work.

A cause for great concern is that at the time of these findings, there is no longer a course available in the Western Cape that is dedicated to the

training of specialist art teachers, and the disciplines in the Arts and Culture Learning area are being taught by generalist teachers. These teachers have no specialist understanding of visual art, and in many cases, no particular interest. Frequently, the time on the timetable that is dedicated to visual art is used to complete unfinished work, or at best to colour in maps, illustrate projects, or to draw with no guidance or direction.

In many schools in the Western Cape, there is no room dedicated to art teaching. In the townships surrounding Cape Town, there is even less art taught, as black teachers themselves did not have the benefit of art training when they were at school. There appears to be very little hope that the children of the twenty first century will be guided into a deeper understanding of their worlds, when their teachers have not been given this understanding themselves.

As a result of these findings, it would appear that Lowenfeld is no longer a strong guideline for current art education. Although his theories will always be mentioned in art educational discourse, this research suggests that art teachers should be encouraged to remediate the problem areas that have emerged, rather than to teach to an expected schema. This provides a challenge for the trainers of art teachers, who are attempting to encourage a creative interpretation of Curriculum 2005. Perhaps this will provide us

with the opportunity to re-evaluate our training and learning content, and to emerge wiser, more thoughtful, and better educators.

Cape Town 2004.

University of Cape Town

Bibliography

In attempting to research the use and application of Lowenfeld's theory of Schematic Development, I experienced great difficulty in sourcing reading material. Much has been written about Lowenfeld's theories of art education, and some of his lectures have been recorded, but there appeared to be a scarcity of literature about the Stages of Creative Development, and their application.

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PERSONAL REFLECTION

I did not want to embark on any course of study. I believed that I was essentially a teacher, and not an academic. My passion lay in the inspiration of my students, in making them excited at the prospect of their own learning, and in encouraging them to be the best art teachers that they could be. I had an extremely full lecture load, and did not imagine that research could easily be fitted in to my overloaded schedule.

Some years ago, at the Cape Town College of Education, we were told that we would be amalgamating with the Cape Technikon at some stage in the future. None of us paid much attention to that fact, until it became a rather sudden reality. In order to hope for an appointment at the Faculty of Education, we all had to have Master's Degrees, or to be in the process of studying for one.

And thus it was that I reluctantly found myself in a lecture room at the University of Cape Town, afraid, nervous, insecure and reluctant.

Four years later, I look back at the process with such delight that I amaze myself! The coursework for this degree opened a world of things that I had scarcely encountered. As a group, we were extremely privileged to have superb lecturers who were specialists in their fields, and who made the learning so interesting and inspiring that *trekking* tiredly up the hill for lectures at the end of a busy day soon became *rushing up* in order not to miss a moment! My own work took on new life as I began to read for the coursework, and then beyond, for my own interest.

When the coursework was over, and the minor dissertation became the next priority, my nerves re-emerged. I did not know where to start! Under the thoughtful and caring, and *brave* guidance of Nigel Bakker, I slowly came to understand that this minor dissertation

would become a reality. Apart from re-discovering and re-evaluating Lowenfeld, I learned many other incidental things along the way. My knowledge of the computer has exceeded even my own expectations, and I finally replaced my eight-year-old system with a brand new computer that even allowed e-mail. I learnt to use the e-mail so that I could send work up to Nigel for comment and criticism.

This new convenience was short-lived, because it became clear that I would have to include drawings within the body of the text, and so a scanner was ordered and installed. It took about a week to come to terms with this new device, which brought its own complications. Even one drawing in a piece of text made the transmission of an e-mail too long, and so I had to revert to hand delivery. Each scan takes about seven minutes to import, from the press of the first button through to the resizing, rotation, saving, insertion and final resizing of the picture within the body of text, followed by the re-organising of the text to fit the picture on to the page. In the process of this work I have made over a thousand scans – most of them finally rejected! I have learnt to make tables, to make text work vertically and horizontally, and to shade certain areas in a variety of tones.

But most of all, I have learnt that so much more is possible than I ever imagined!

I have pored and pondered over Lowenfeld, *really* looked at his theories and their relevance, and in the process have been forced to look at my own practice and its relevance. By the middle of last year, I was making radical changes to the courses that I was teaching, bringing in more and more discussion, awareness and activities based on the development of spatial concepts. The students and I debated, discussed, and explored space ourselves. I am a visual arts teacher, but we were dancing with empty cans, making body shapes in space, and listening for the spaces between musical notes and in African drumming. I hired Simpwiwe Magazi to teach them to be aware of, to move

through, and to be still in space. We applied space to our learning about composition, colour, line and tone. We played with space, so that one day when they are qualified, they can teach their children to do the same thing.

Throughout this process, I have been frustrated by technology. Printers that would not print and computers with a mind of their own drove me almost to the edge of madness, and many late night lullabies with Lowenfeld have been brought unto nought by information that has disappeared into cyberspace.

(Where does it go?! Are there millions and millions of bytes of Master's students' cybertext floating in *space*?)

Finally it is over. Tomorrow for the first time in four years, I will have no work to do, and no reading before bed. The scanner will be silent. Nigel will have some peace. I plan to sleep for eight hours. But I have a really bad feeling about saying that it is all over. Because there is the spatial plane that must be investigated, the curriculum that must be examined deeply, the lag in the progression into the Stage of Dawning Realism that must be explored. This is not over. Good grief, it's only just beginning! But only after eight hours' of sleep!

My sincere thanks to the external examiners for their considerate reading and time, and to Nigel Bakker, for his considerate everything. I was indeed blessed to have so worthy a supervisor, and I am deeply grateful.

S M JOHNSON, Cape Town, February 2004.

**REVIEWING LOWNFELD:
THE SCHEMATIC DEVELOPMENT OF CHILDREN
IN THE TWENTY FIRST CENTURY**

Sandra Johnson JHNSAN002



**A minor dissertation in partial fulfilment of the requirements
of the degree of Master of Education.**

Department of Education

Faculty of the Humanities

University of Cape Town

2004

APPENDIX

APPENDIX

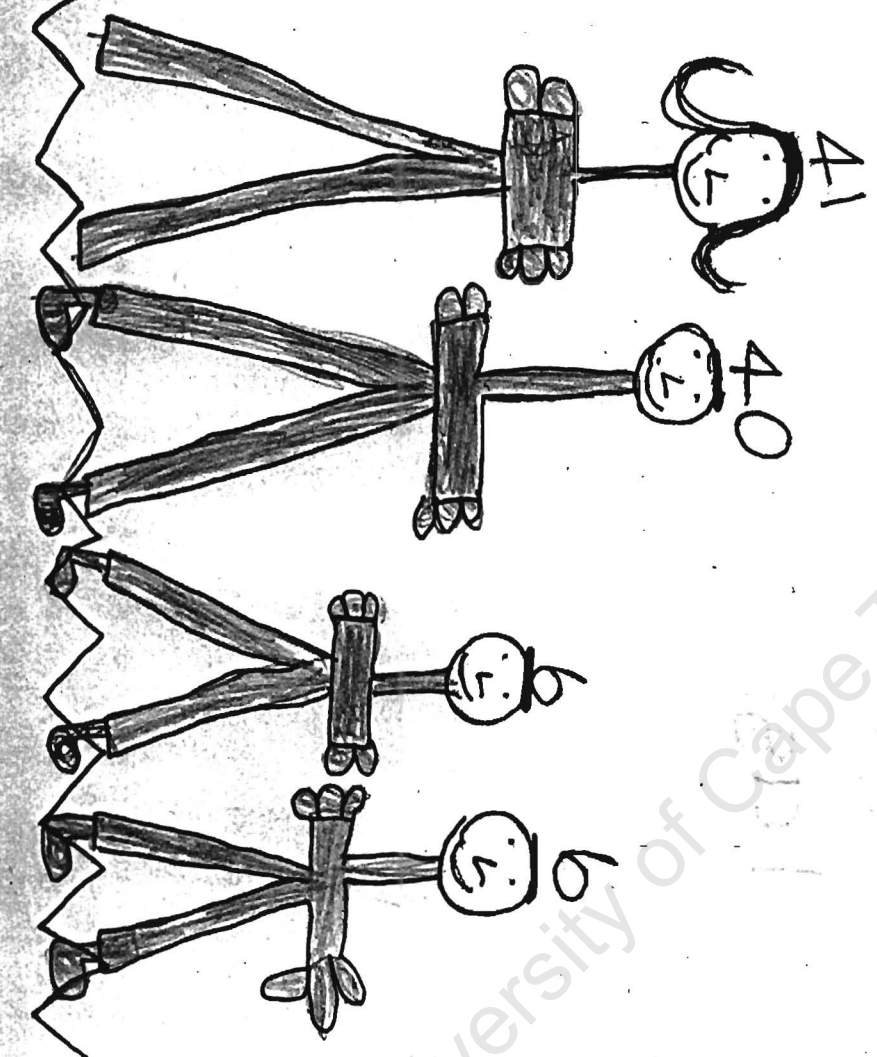
To include all of the sample drawings that were gathered for this research would have made this appendix too unwieldy. Therefore, where there a large number of drawings in an age group, I have selected a representative sample of twenty five drawings to include in the appendix. I have retained all of the other drawings, and they are available for scrutiny should this be required.

In some cases, the drawings were tonally too light for the scanning or photocopying processes, and so it became necessary to overdraw on the lines that the children had made. I confirm that no drawing was altered in any way during this process.

The reader should be guided by the numbers in the bottom right hand corners of the drawings, prefaced by the letter 'A'. Other letters and numerals were added during the process of analyzing the drawings, and made for easy reference during the early stages of this research.

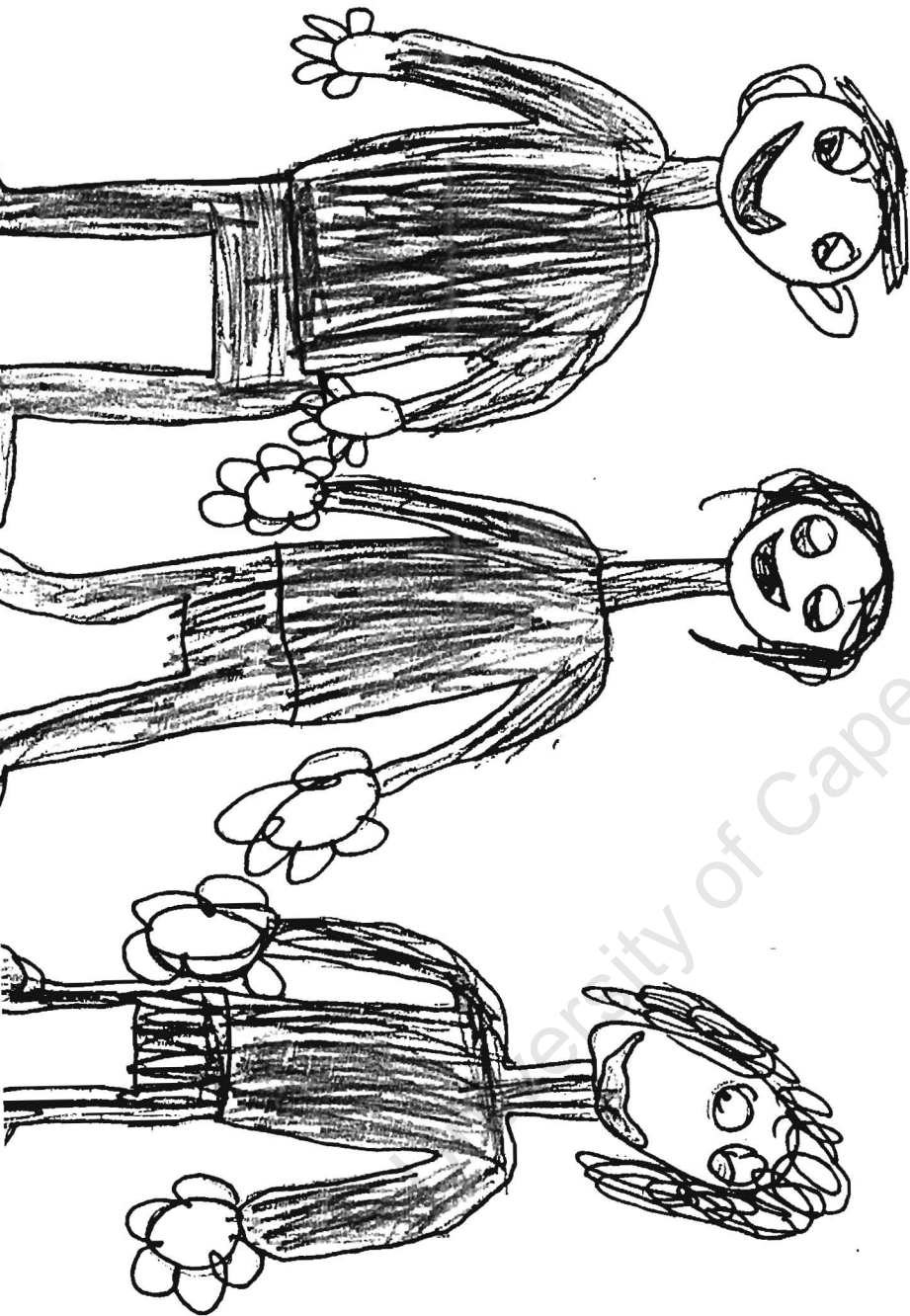
THE SIX-YEAR-OLD DRAWINGS

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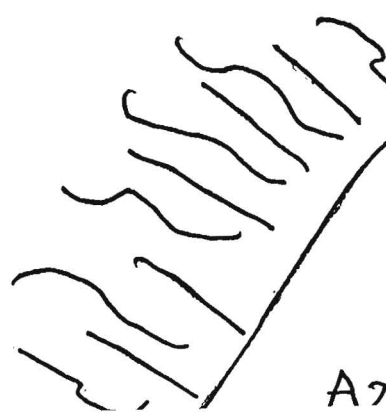


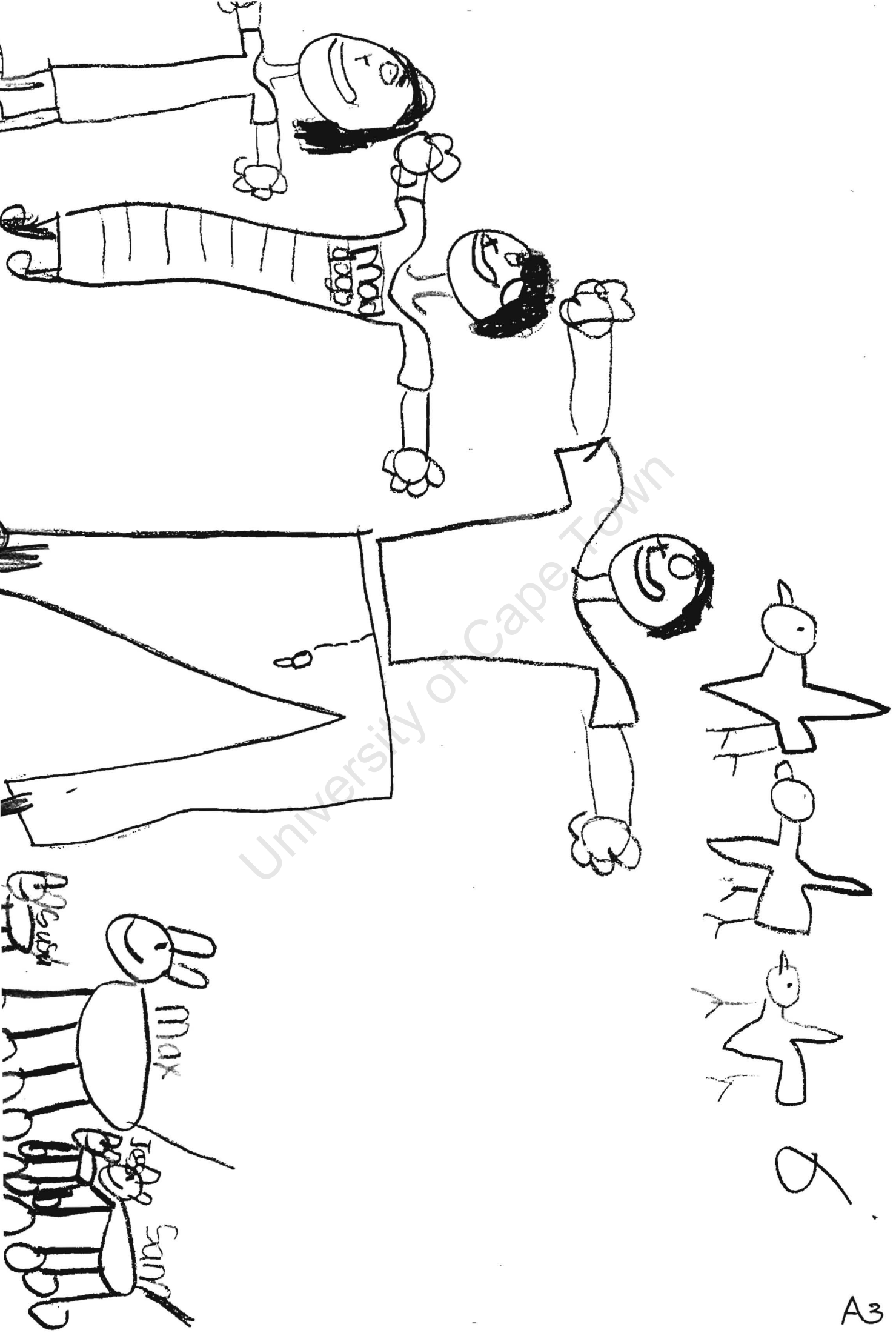
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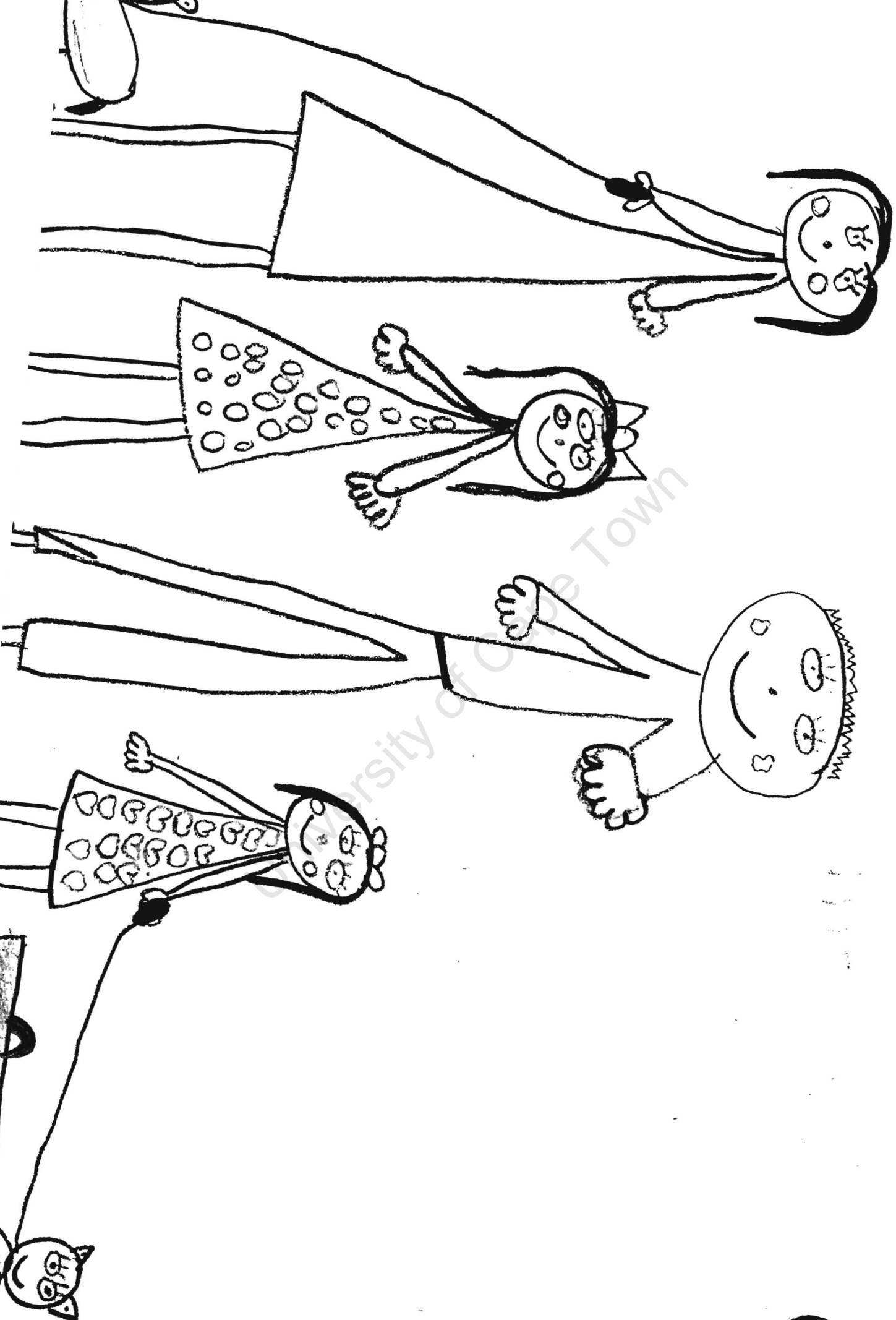


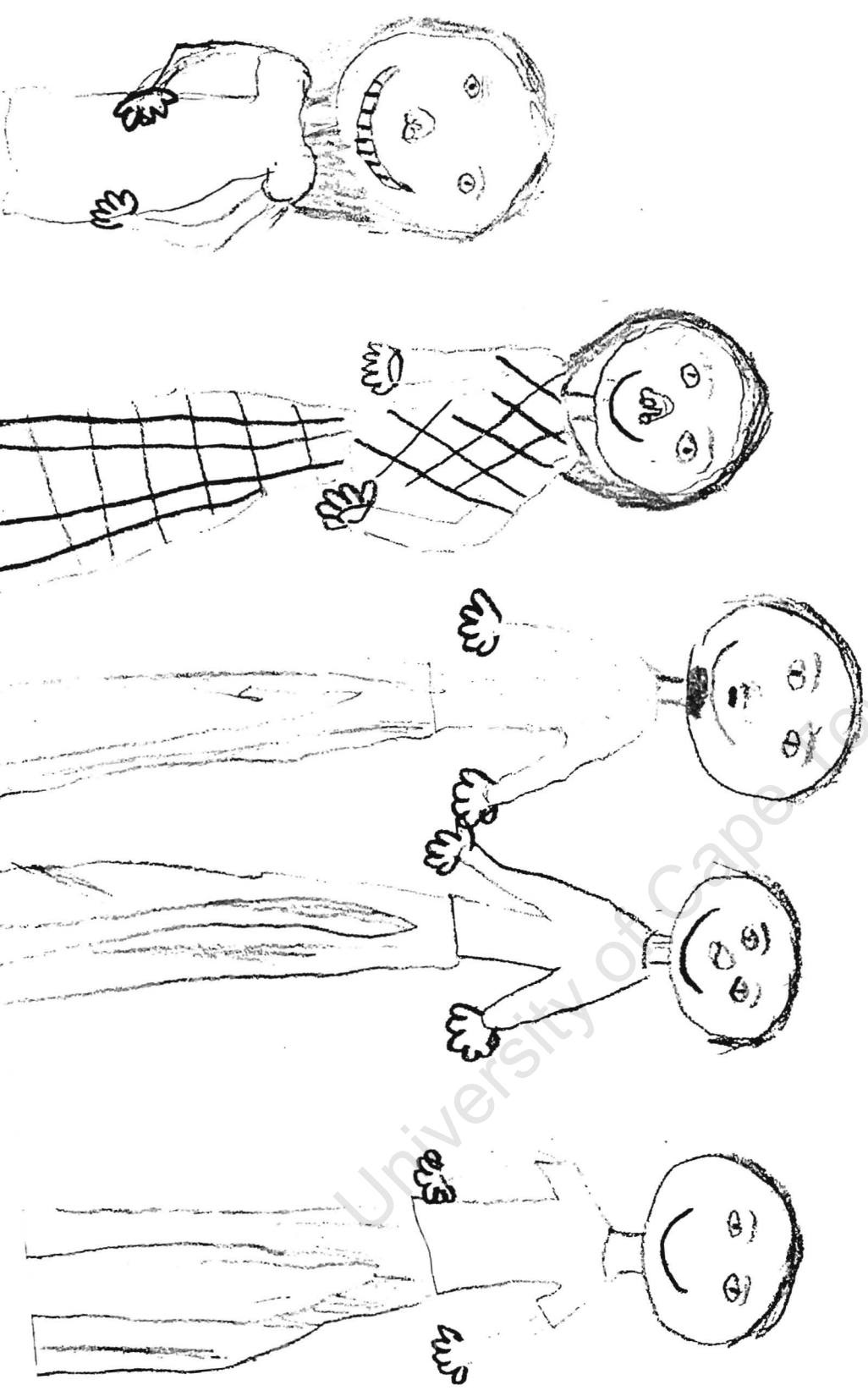


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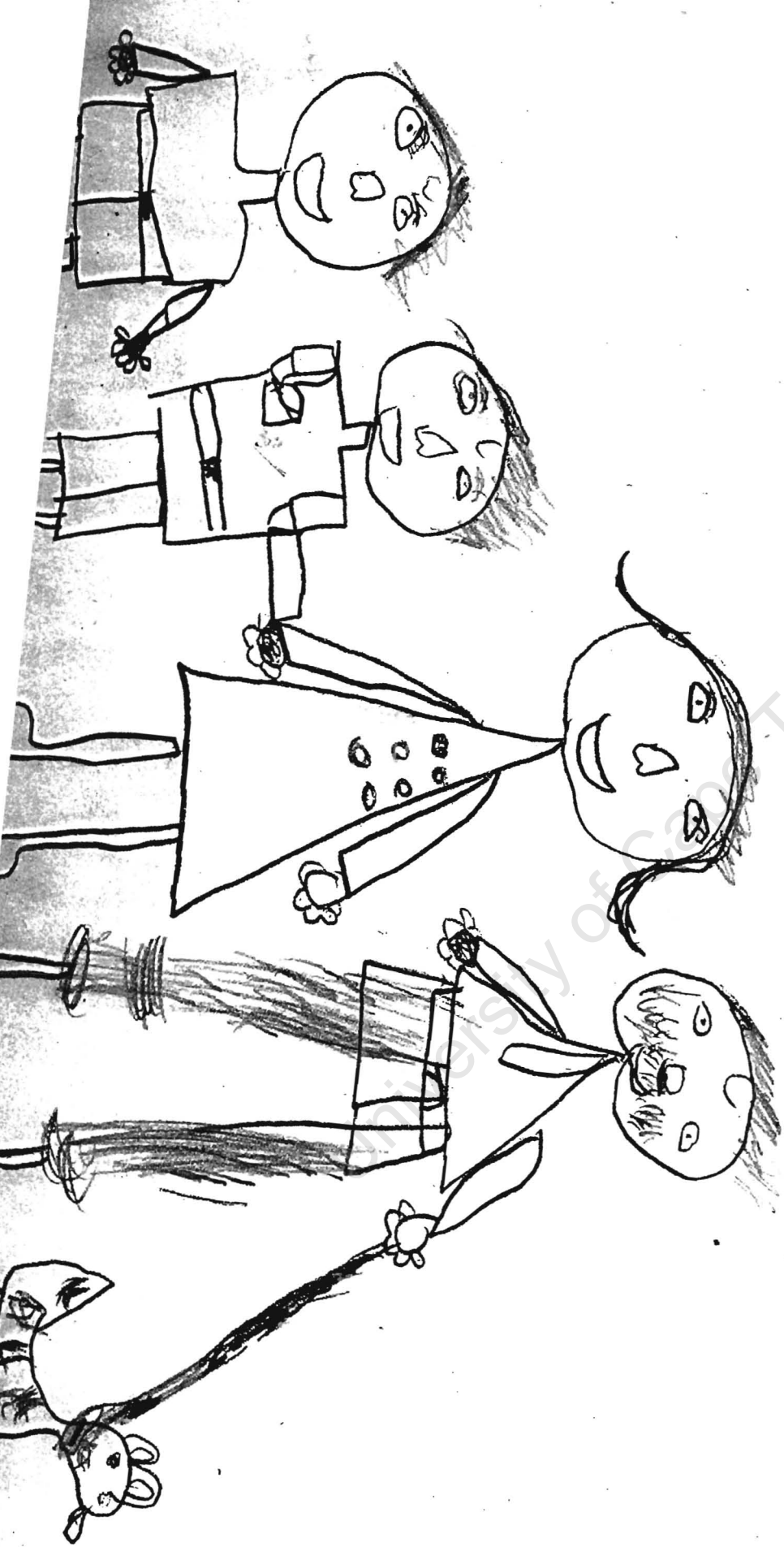


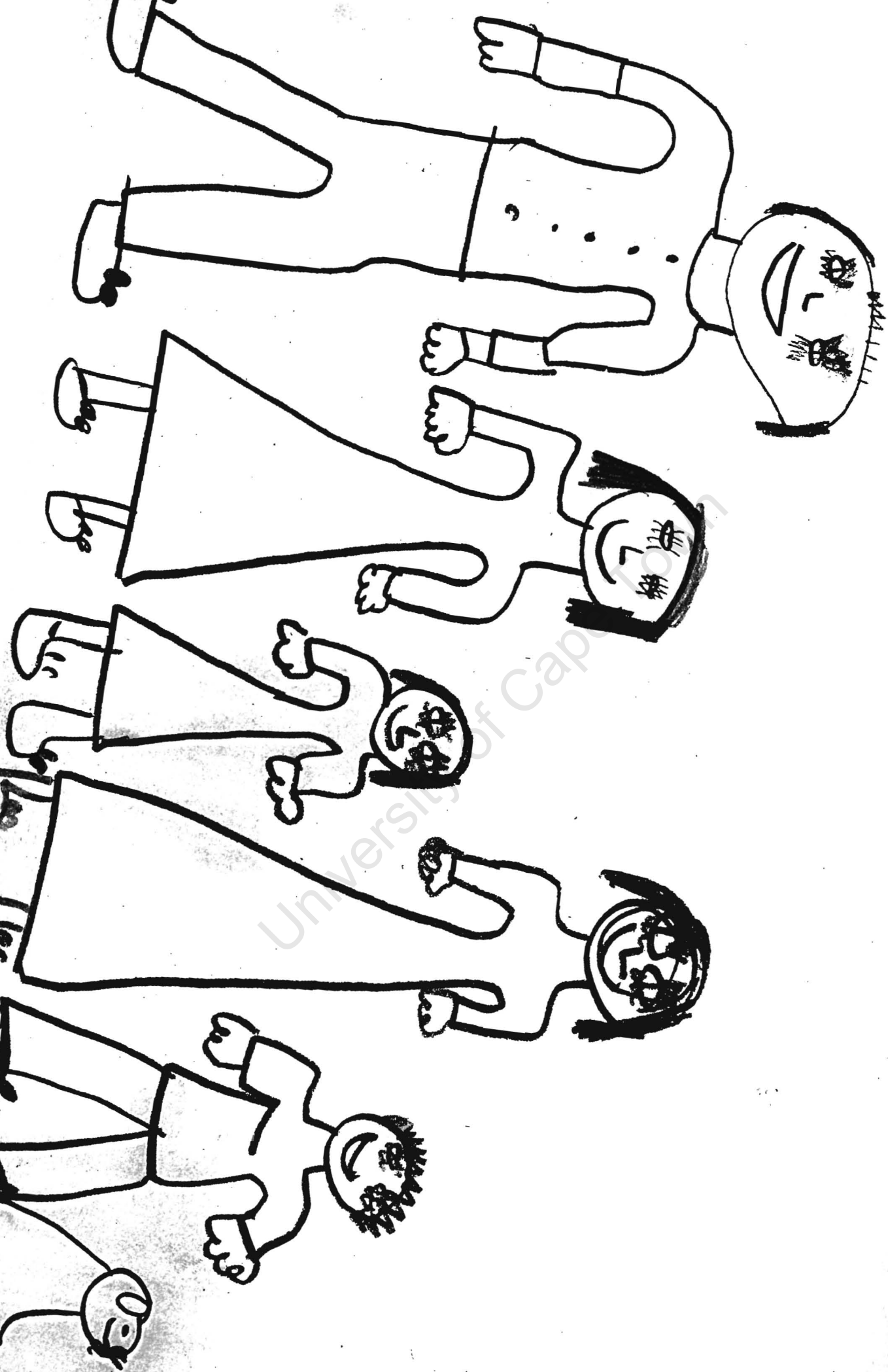


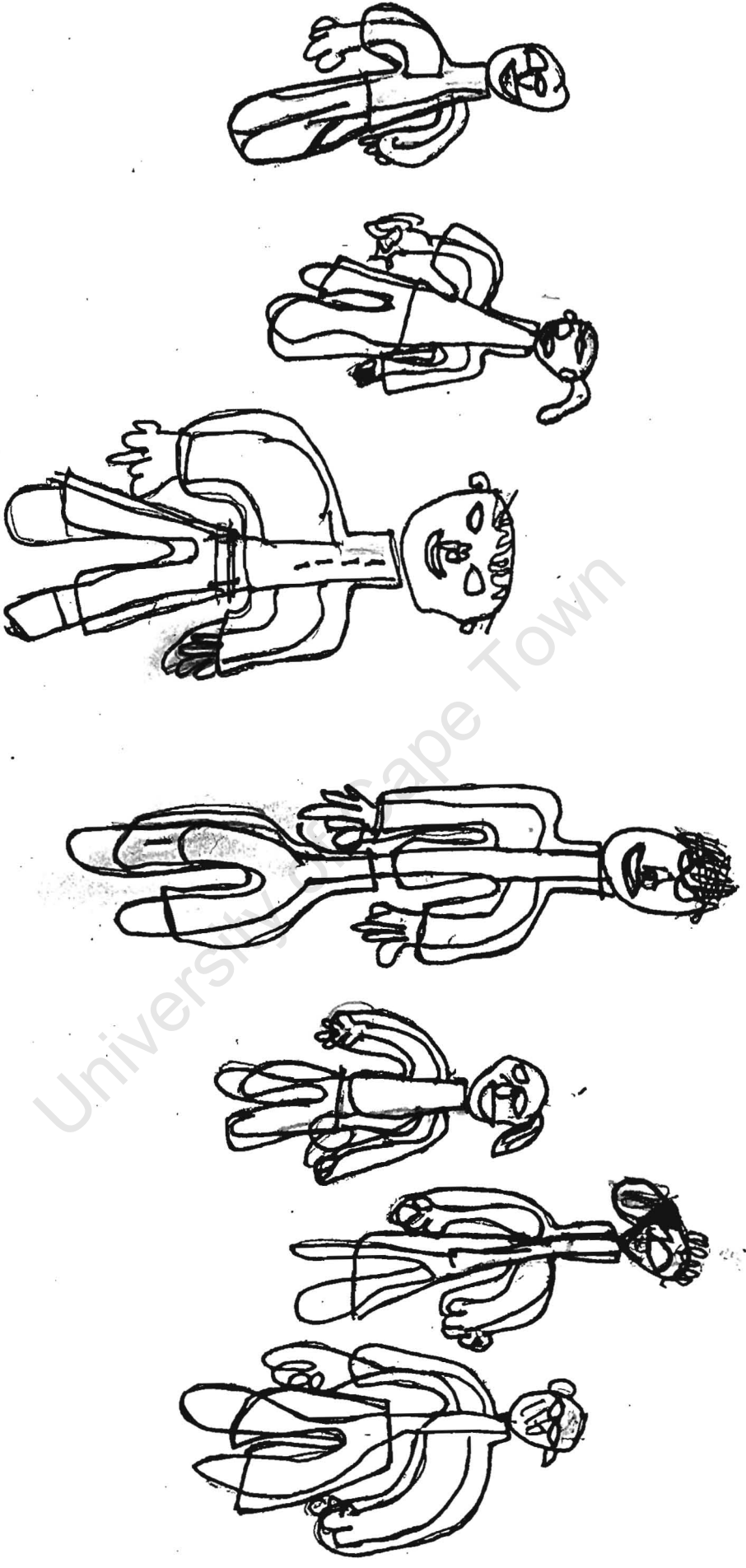


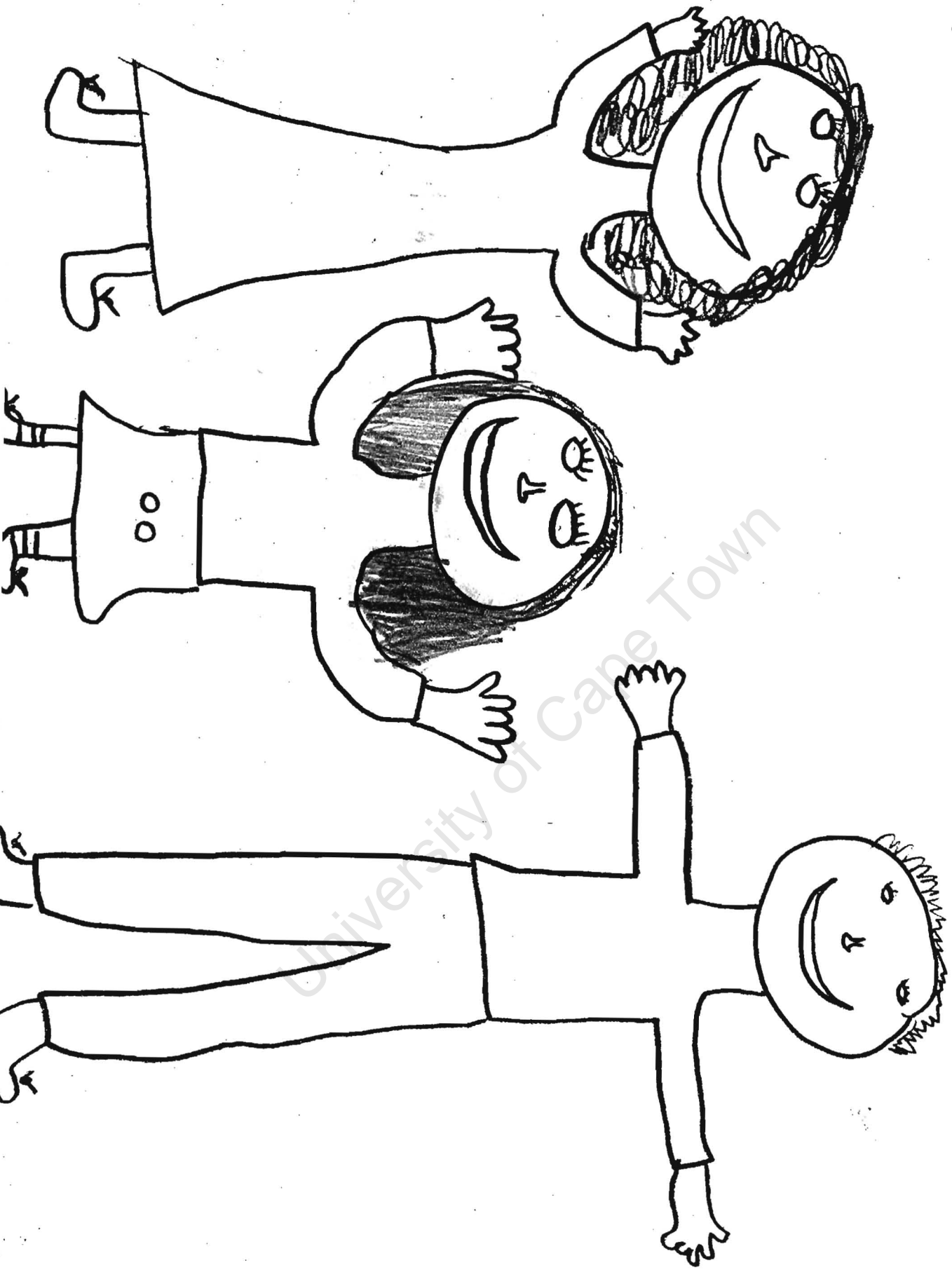


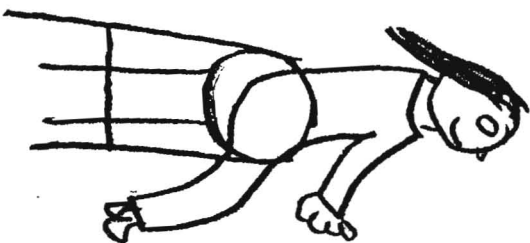
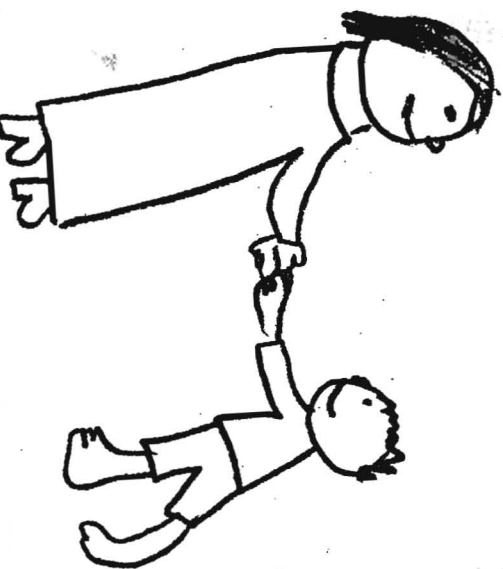
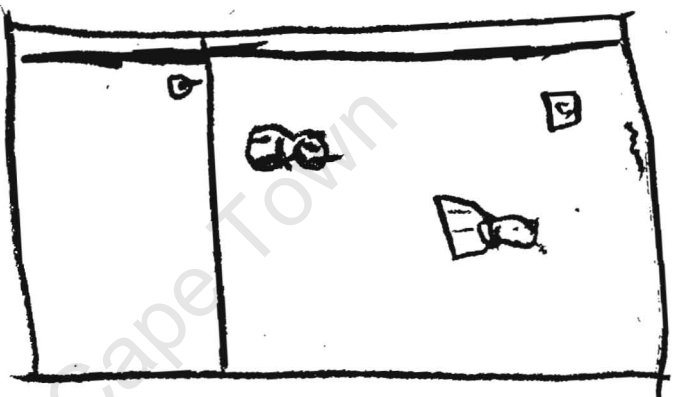
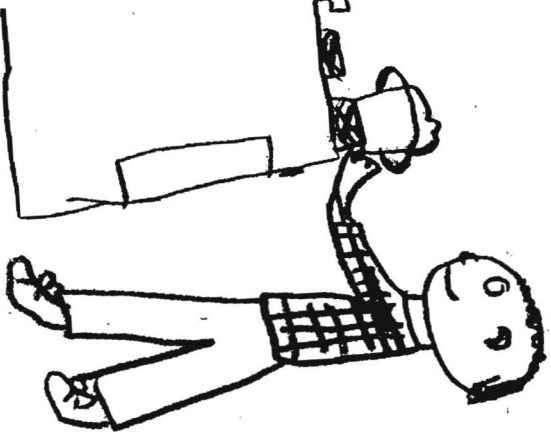
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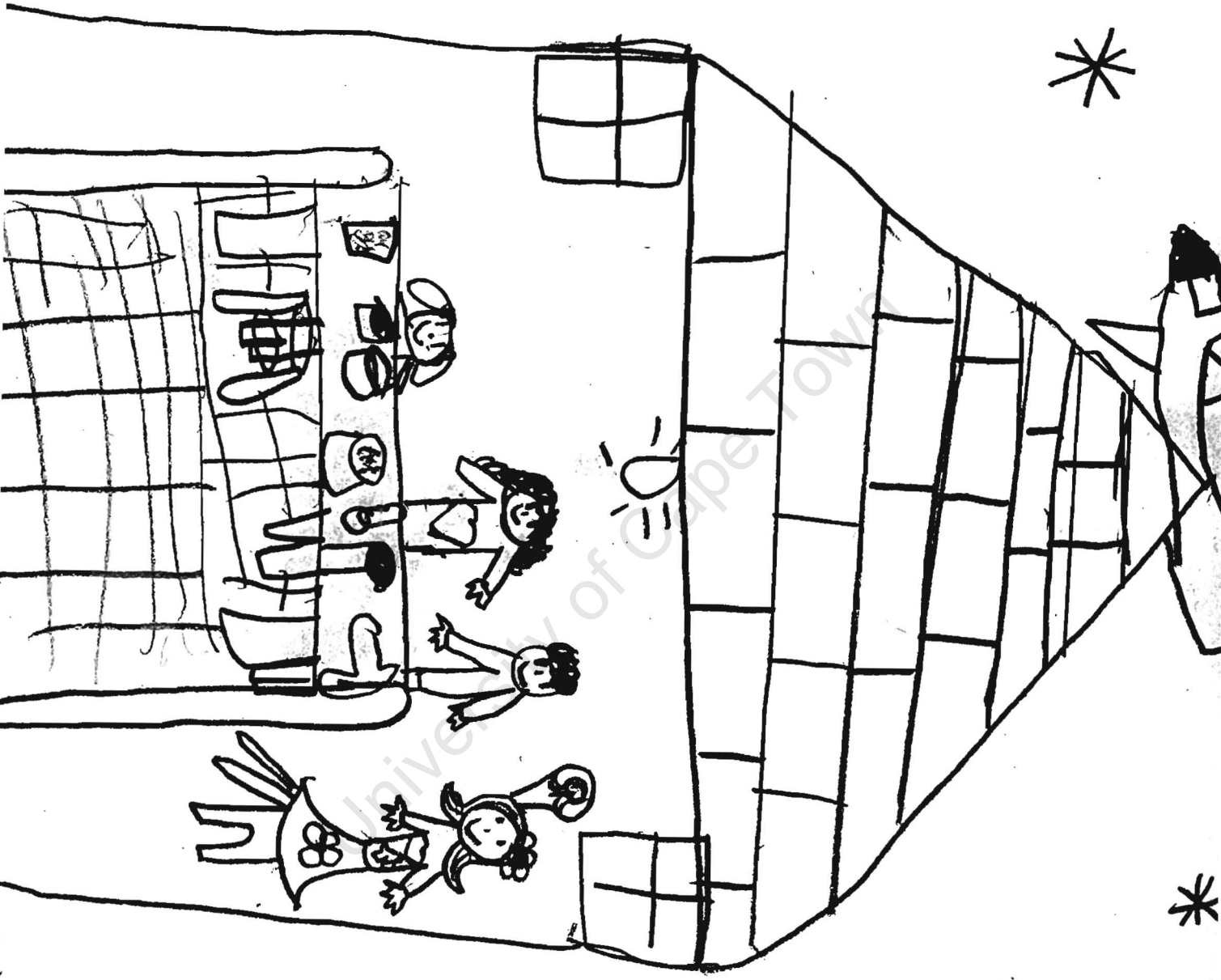




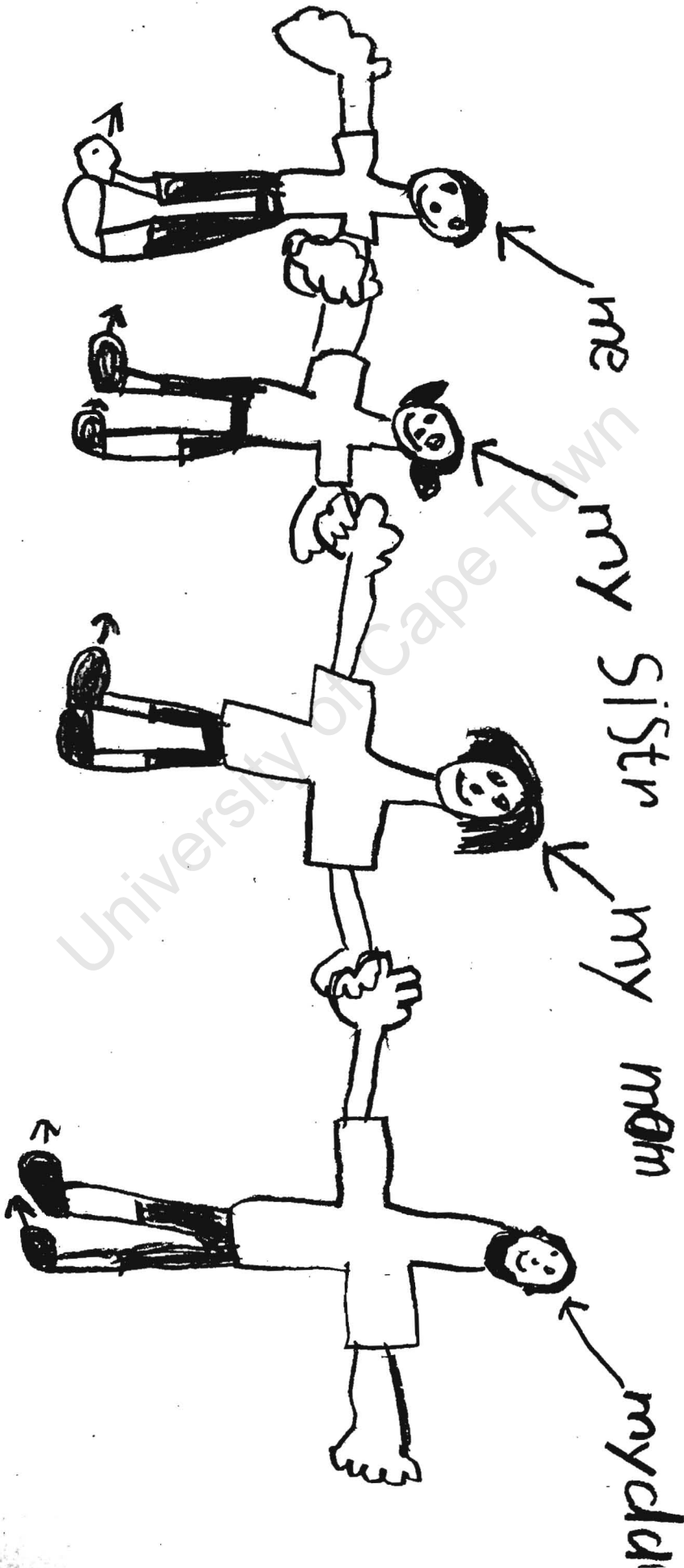
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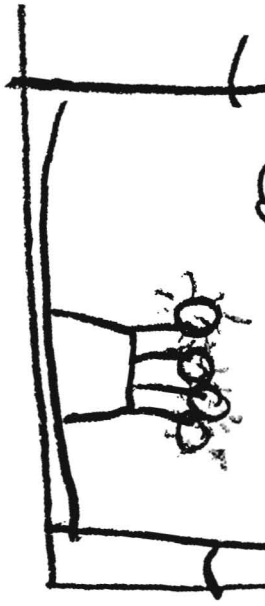
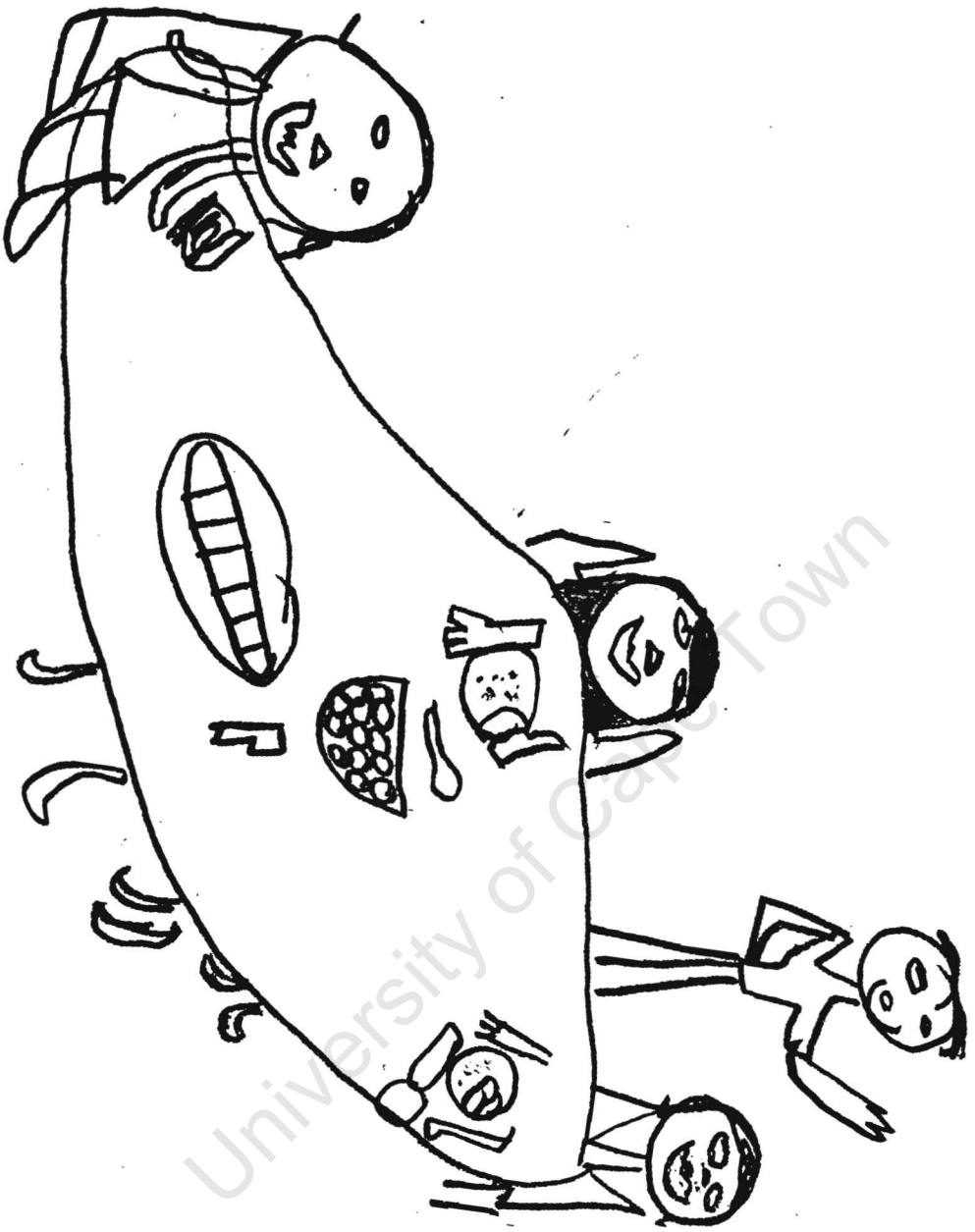


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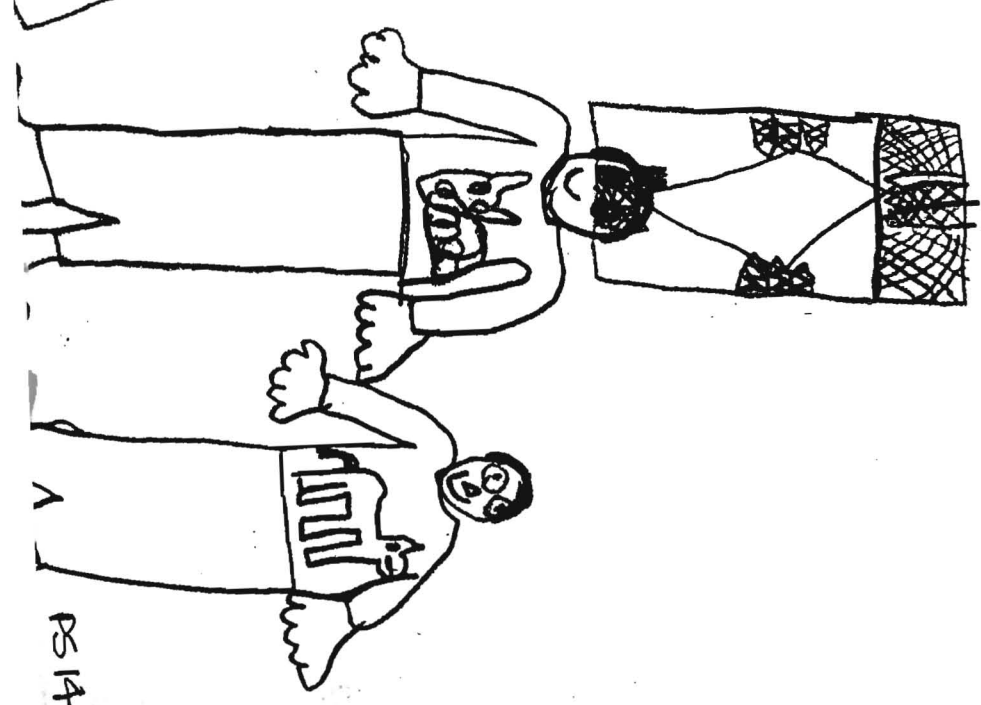
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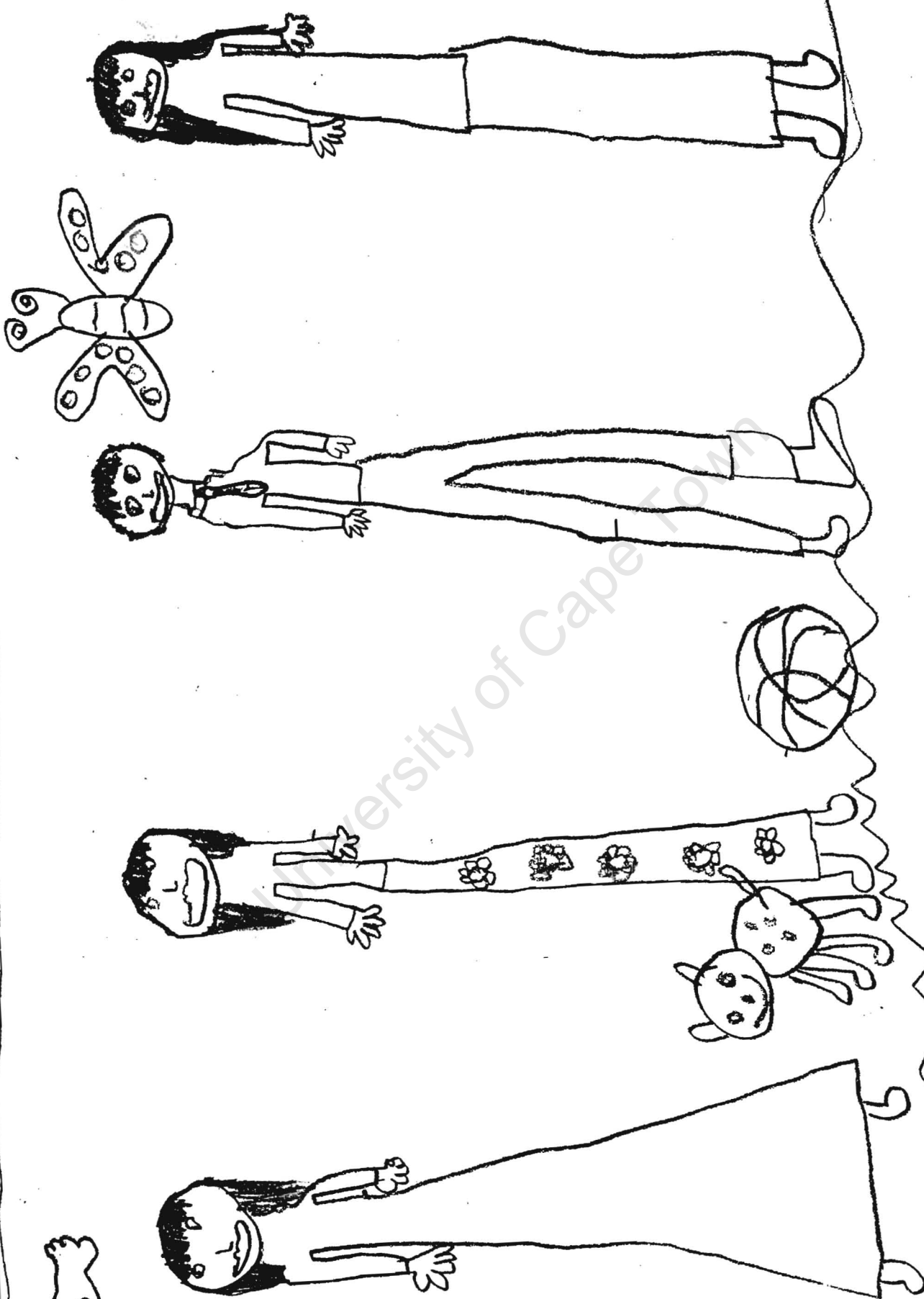


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THE SEVEN-YEAR-OLD DRAWINGS

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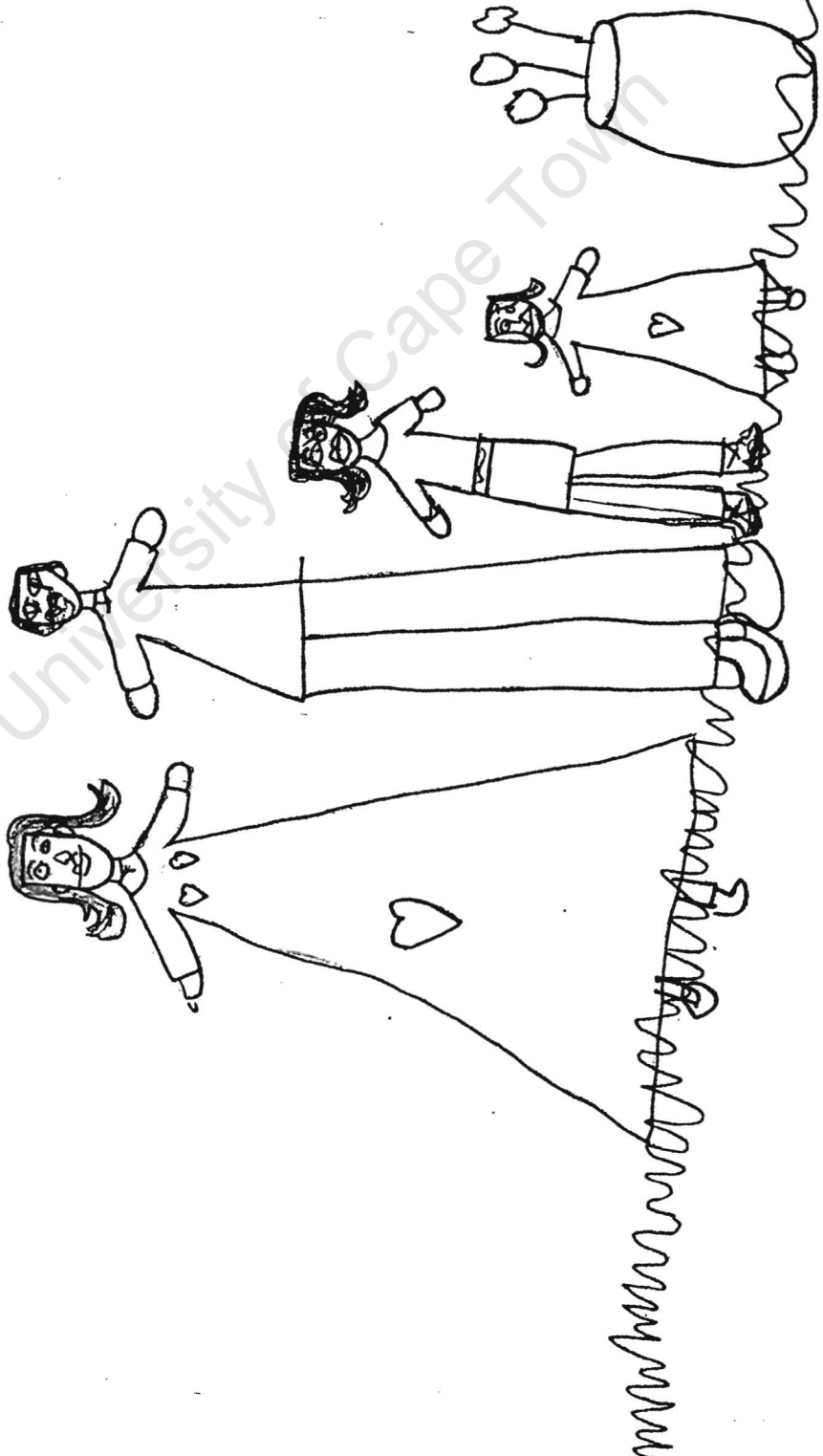


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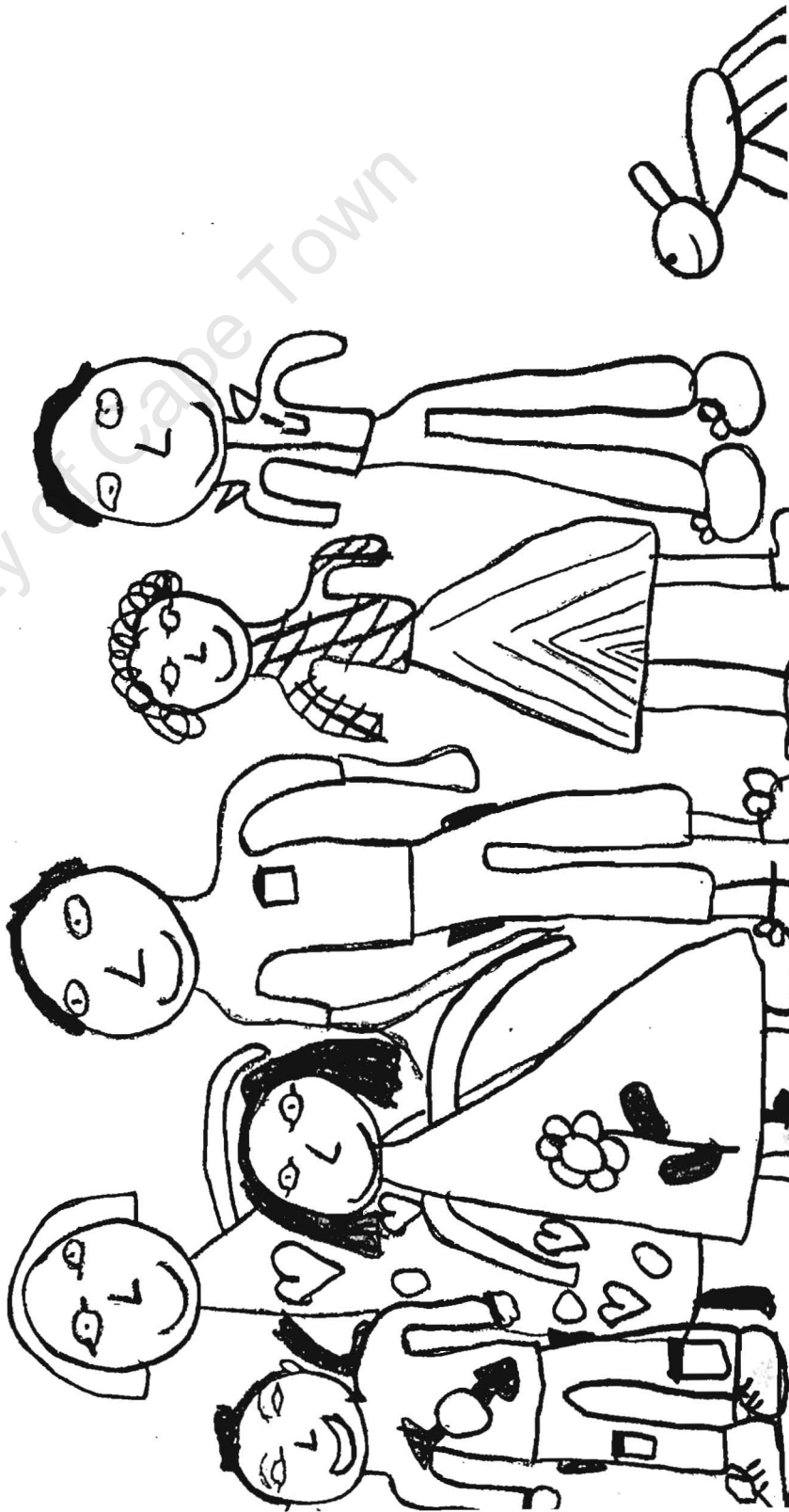
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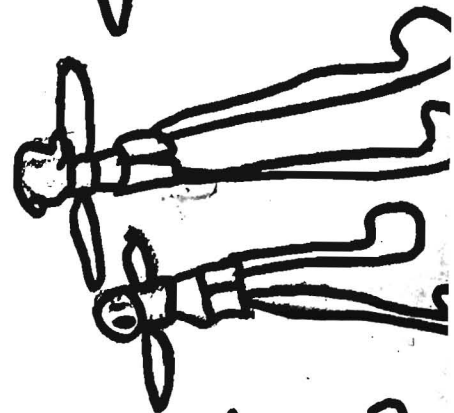
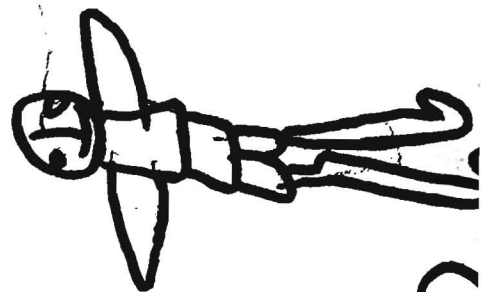
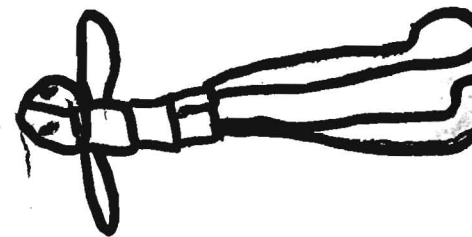
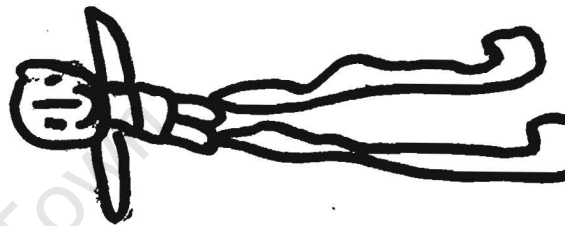
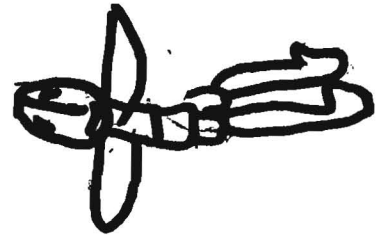
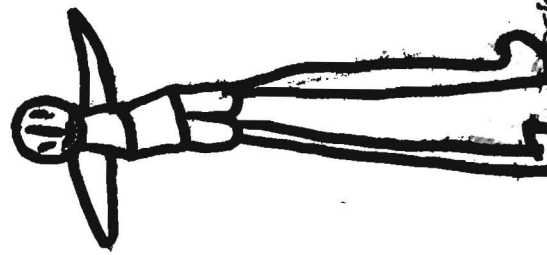


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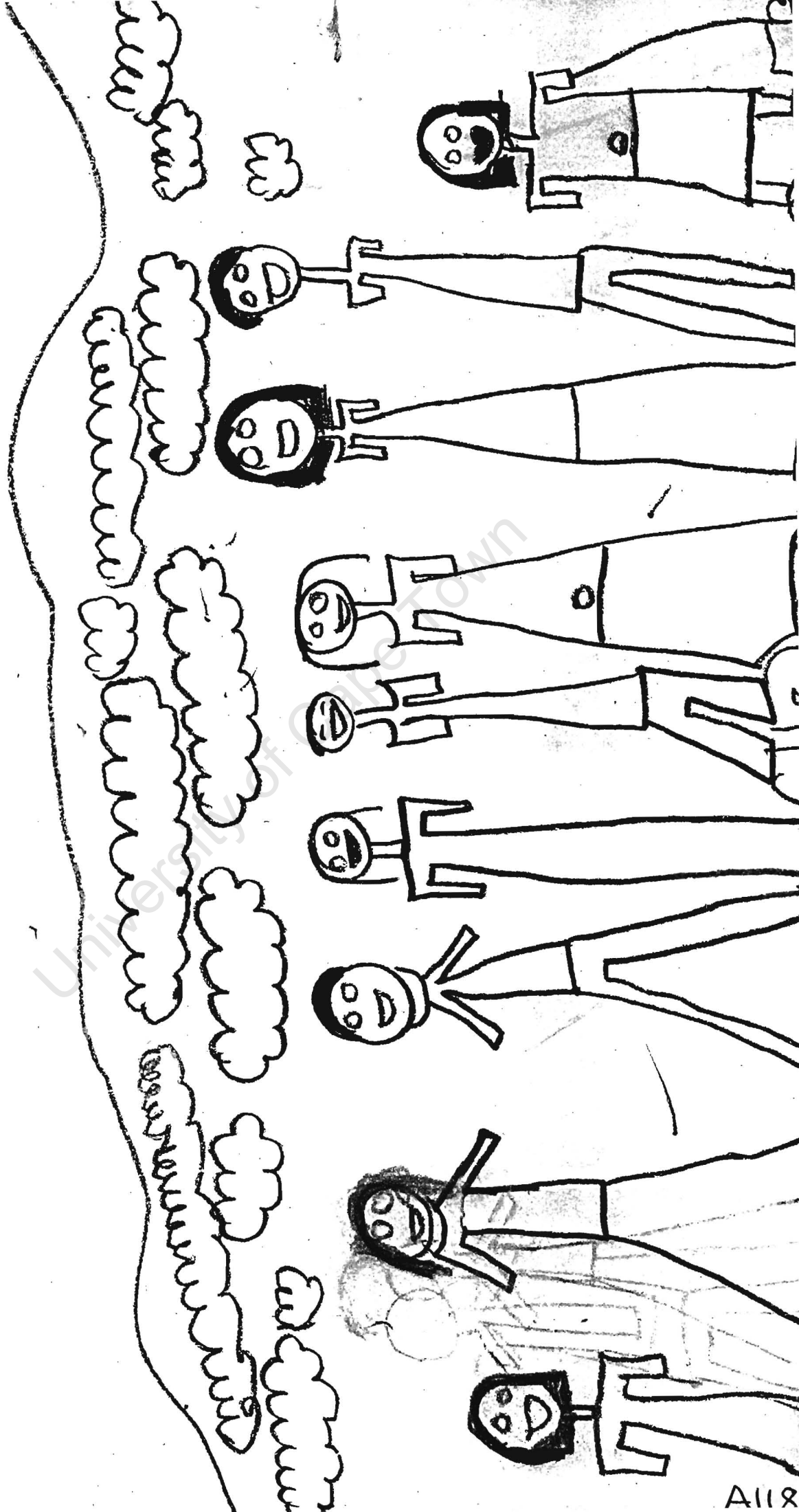


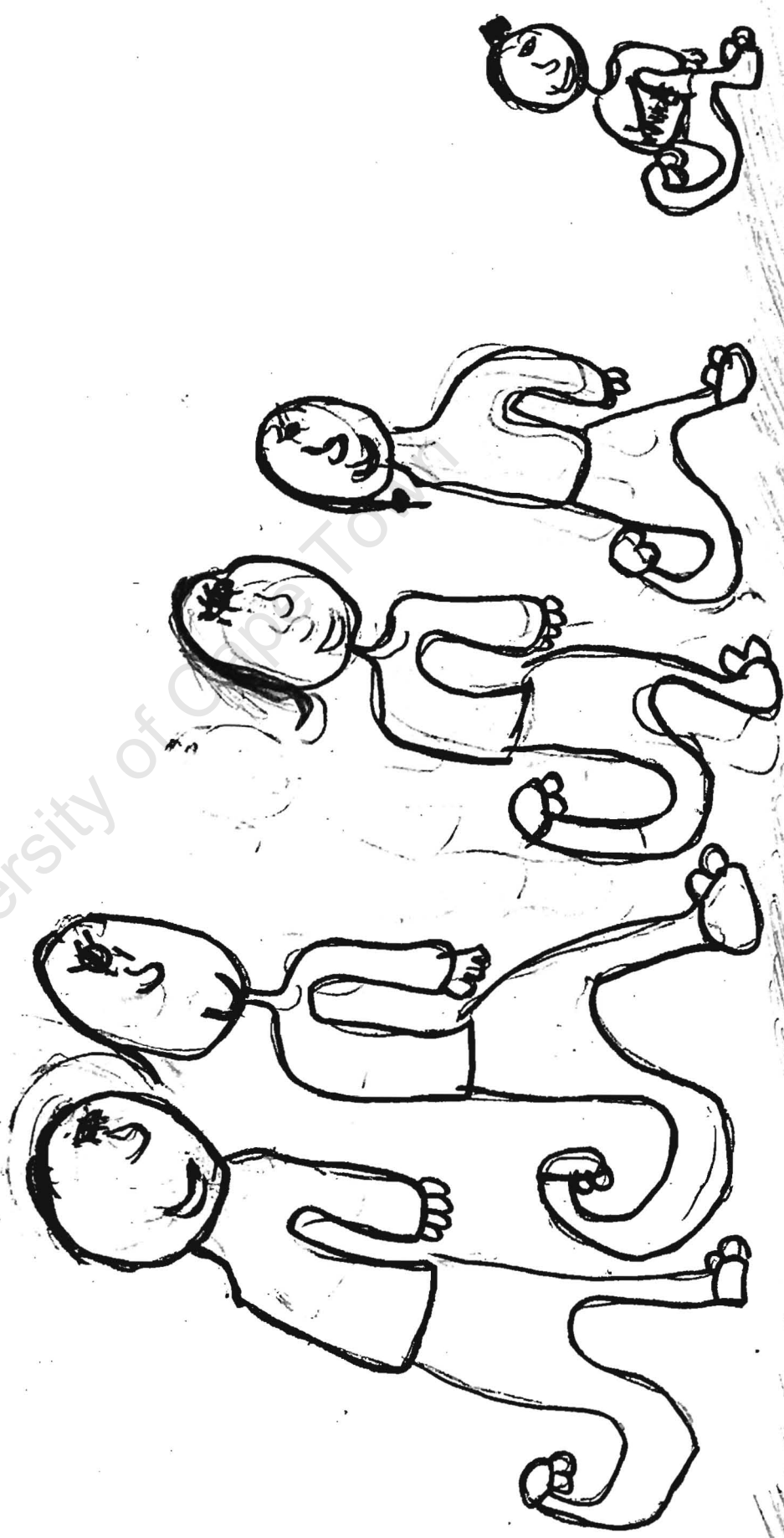
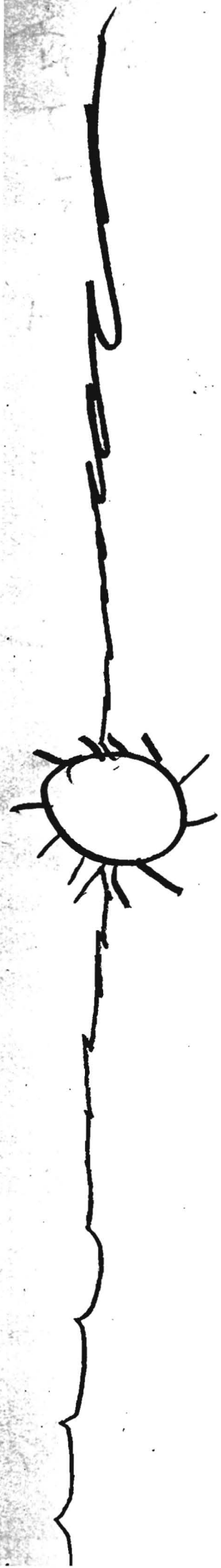
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Chris

By

Age 7

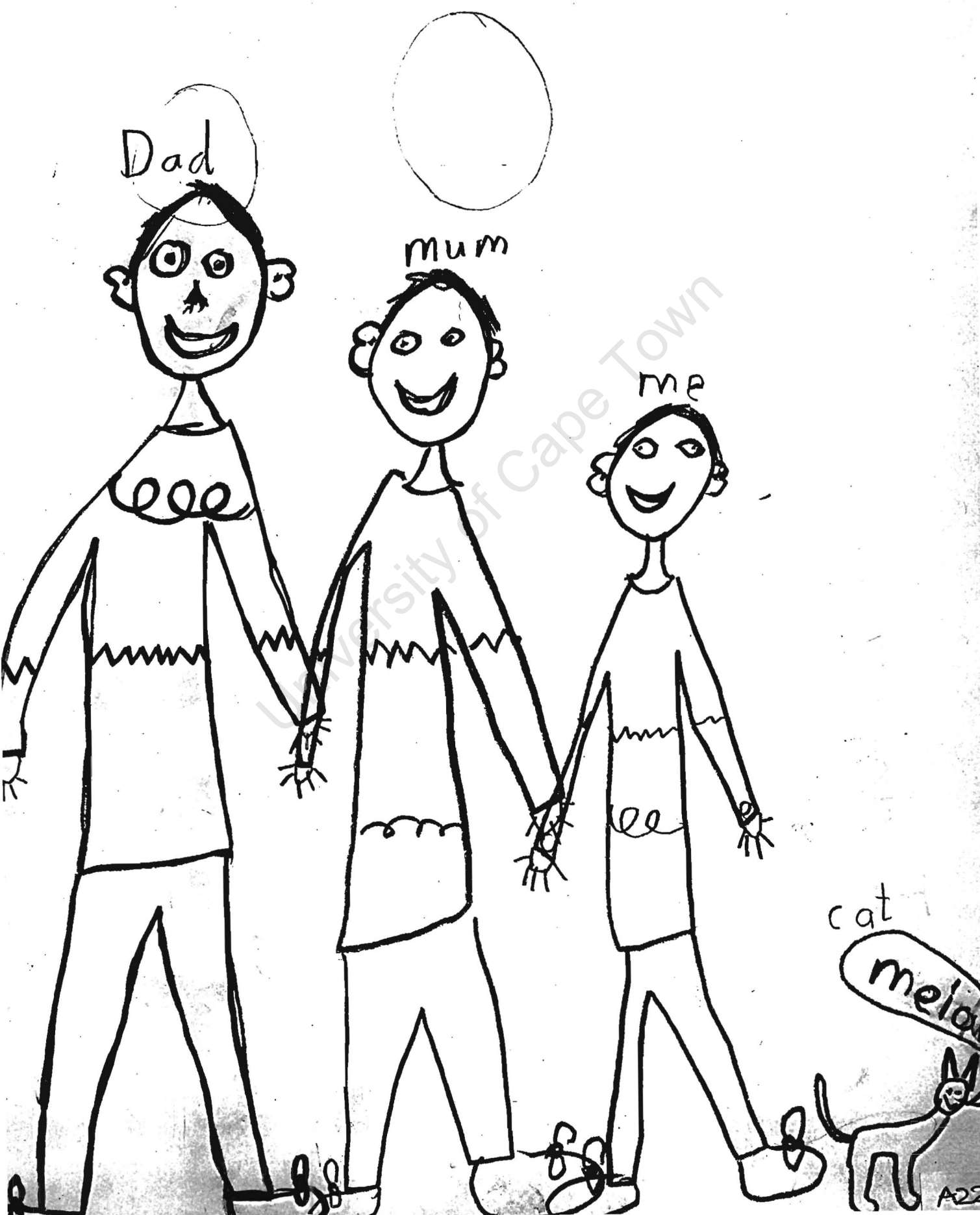




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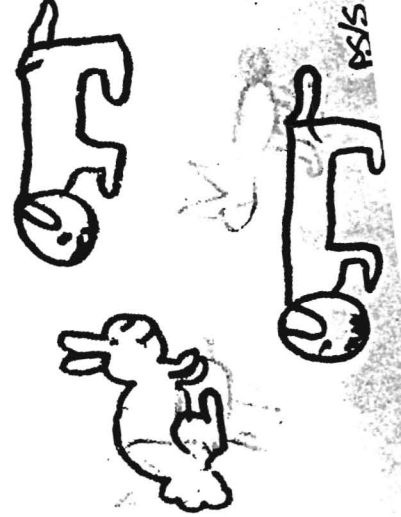
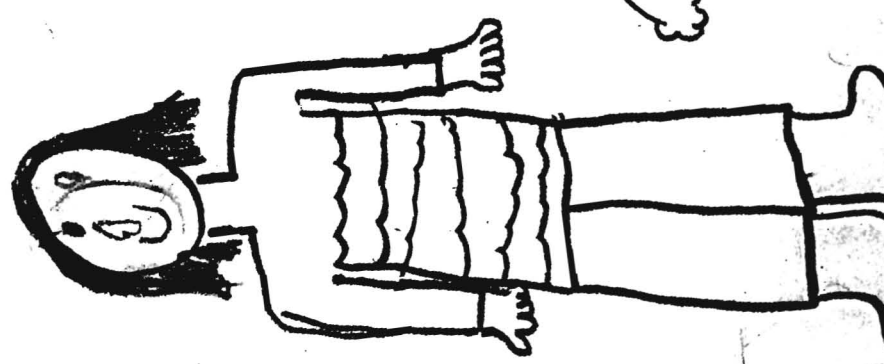
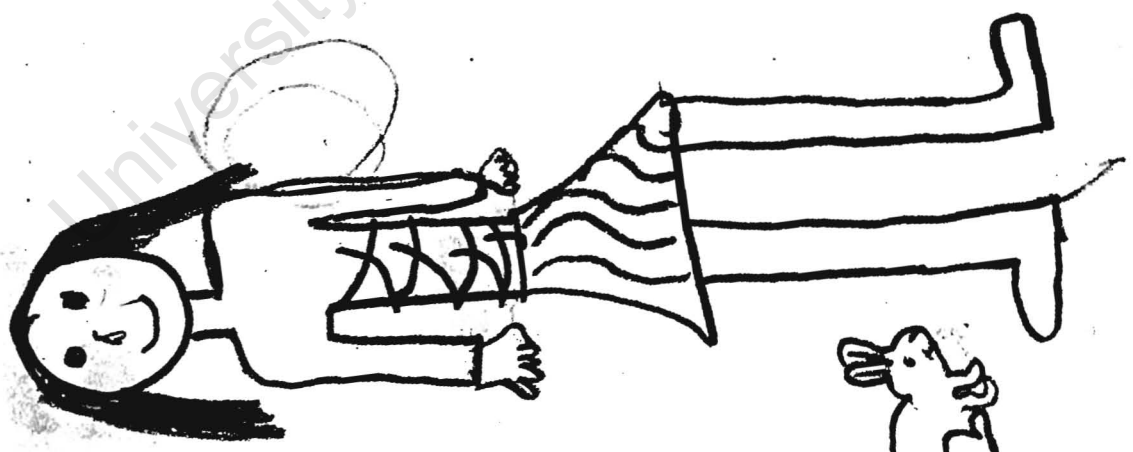
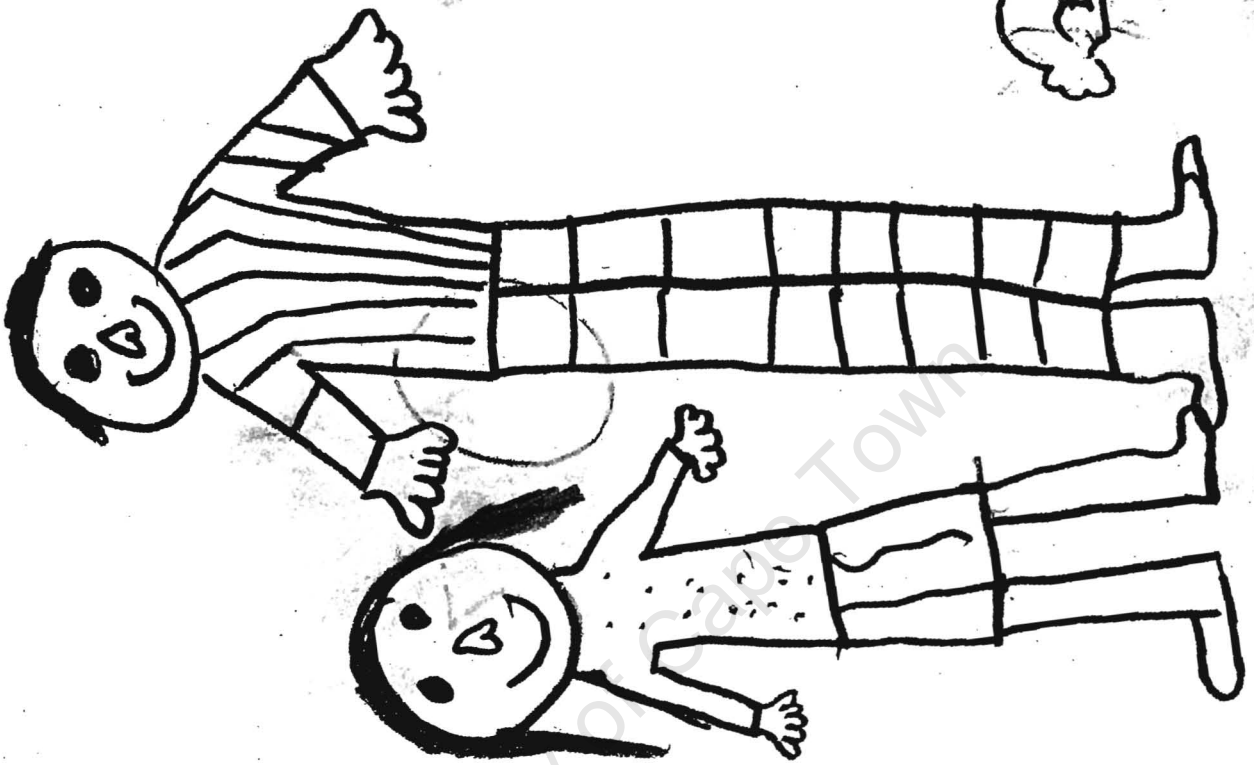
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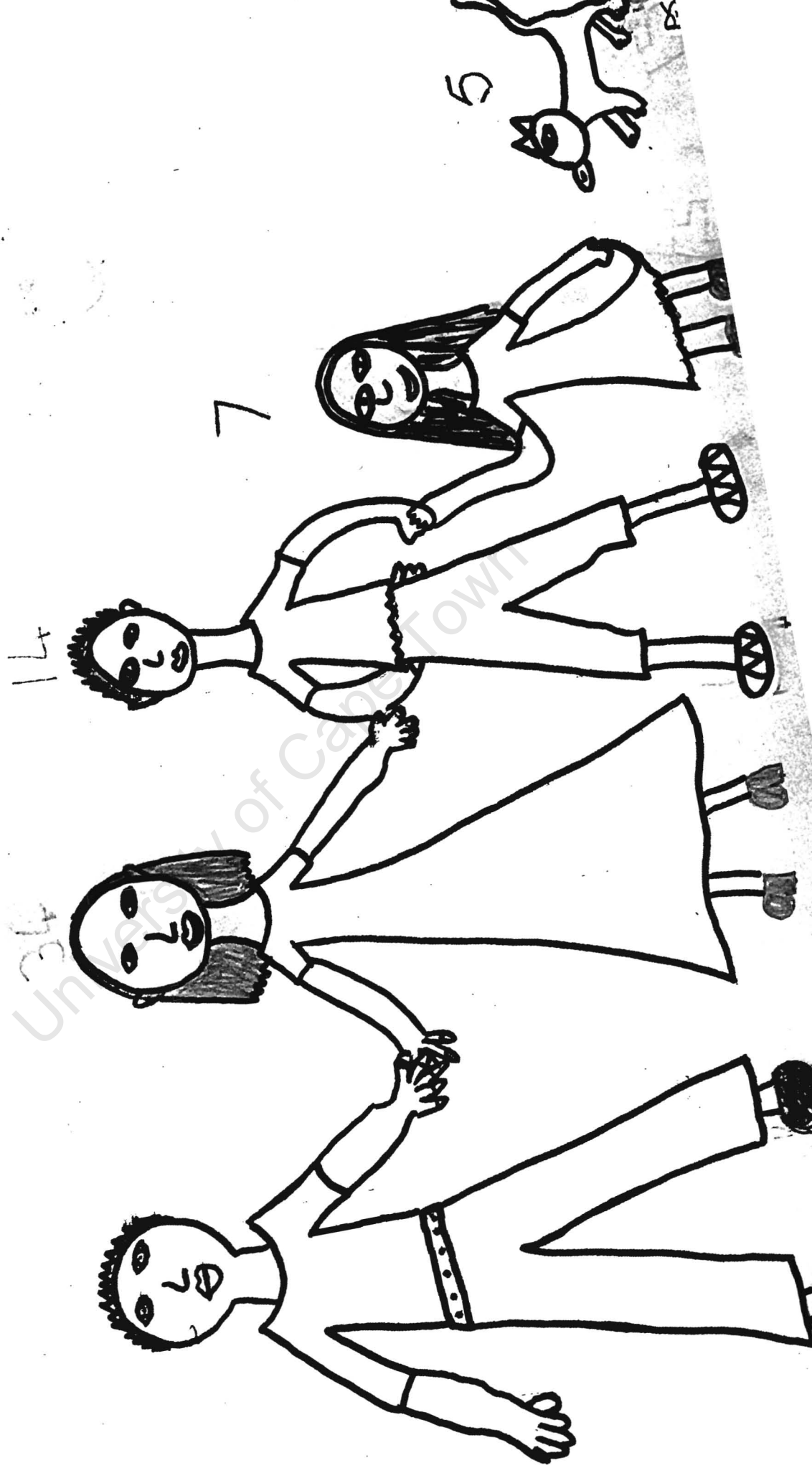
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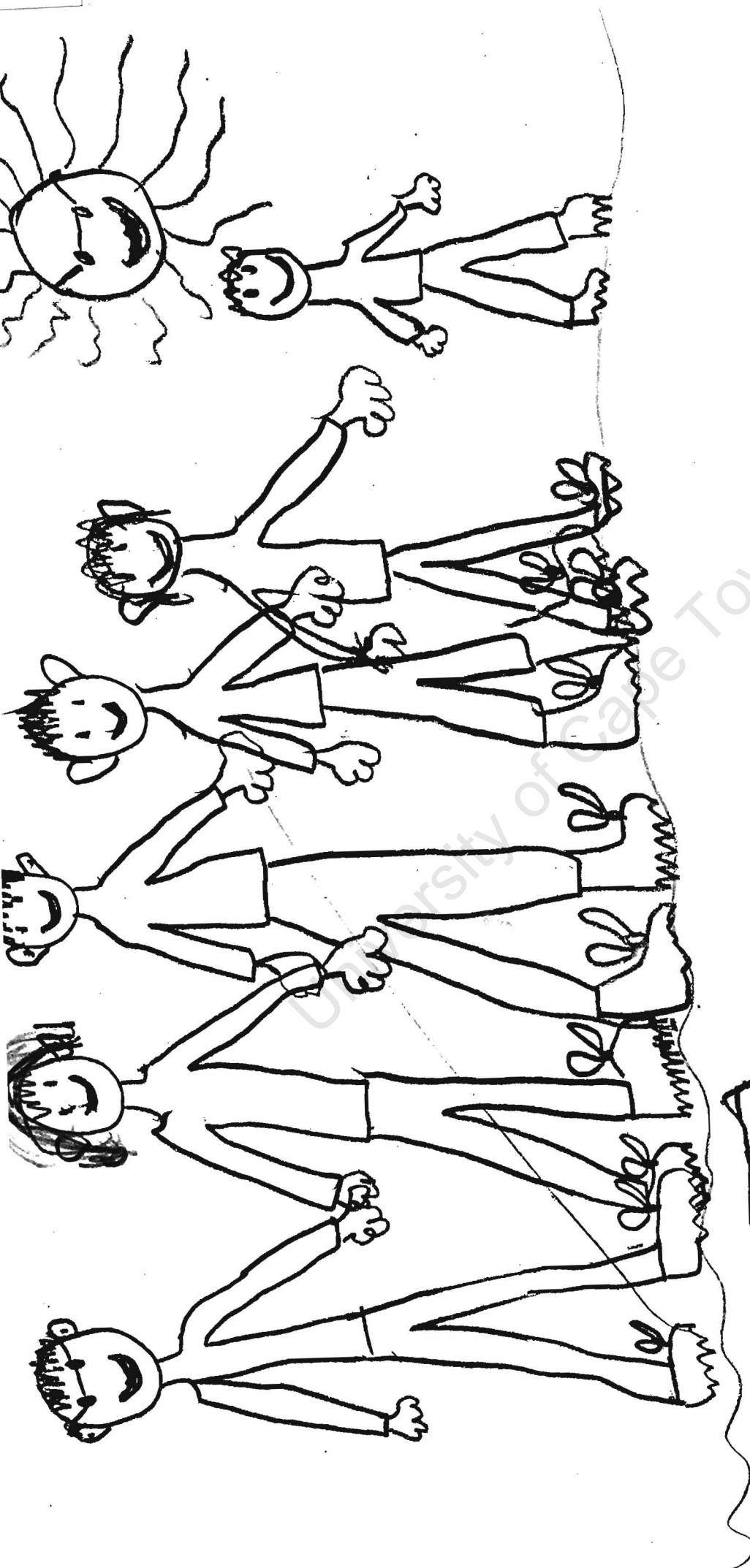
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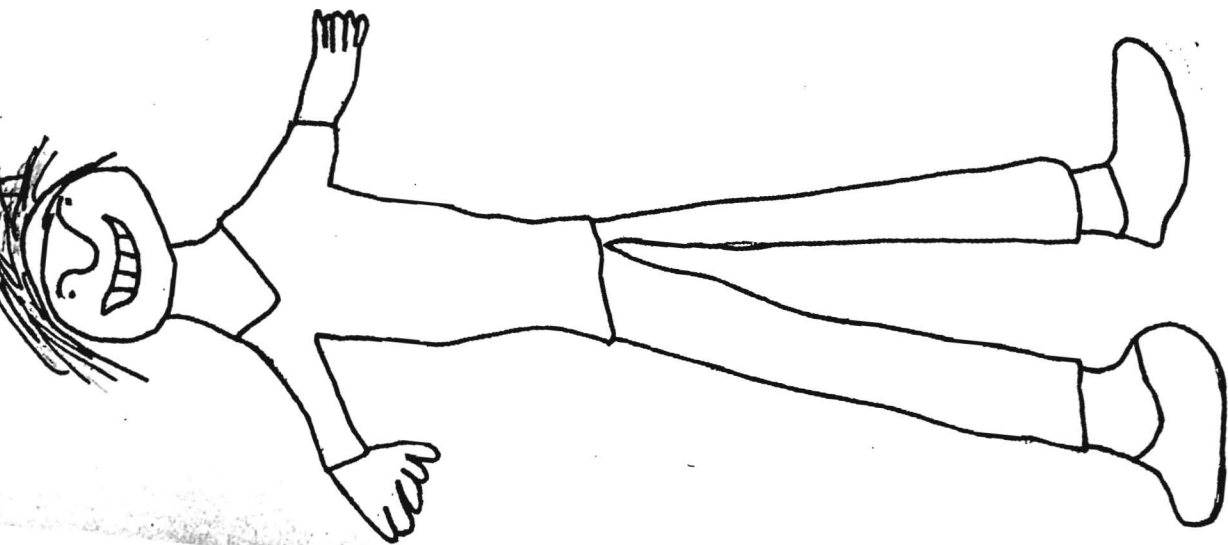
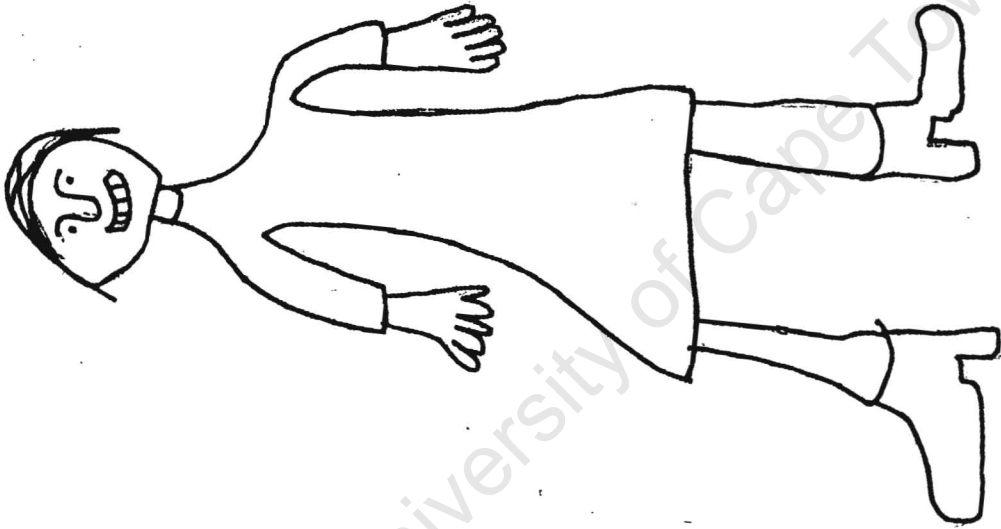
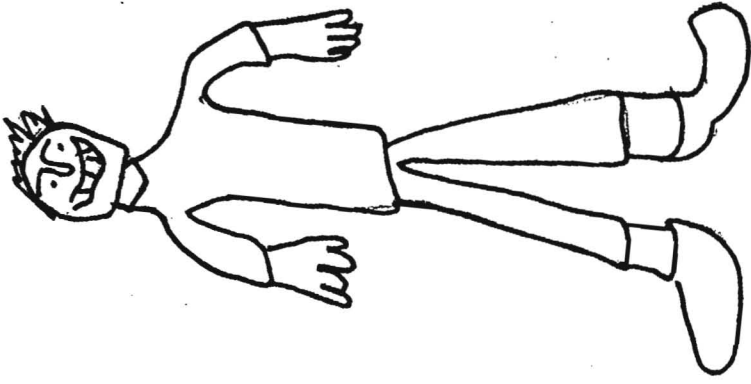
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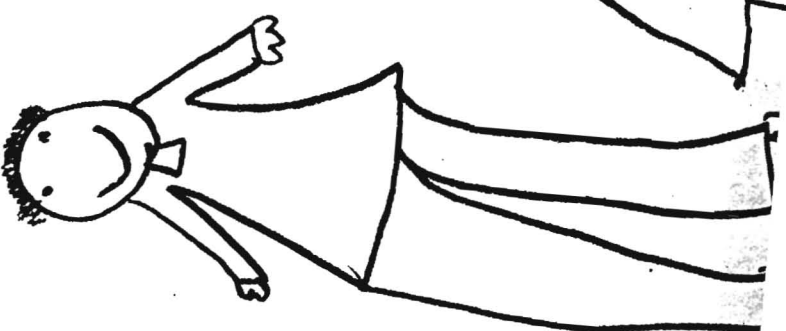
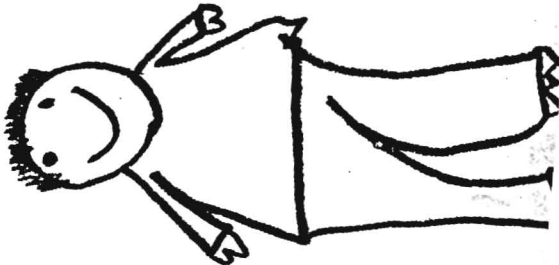
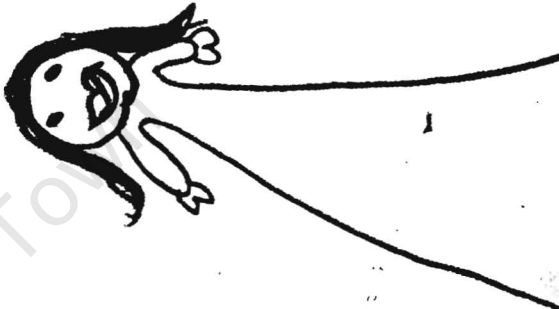
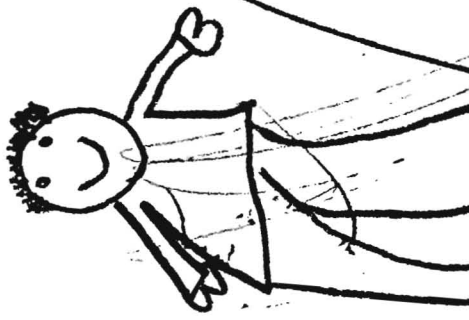


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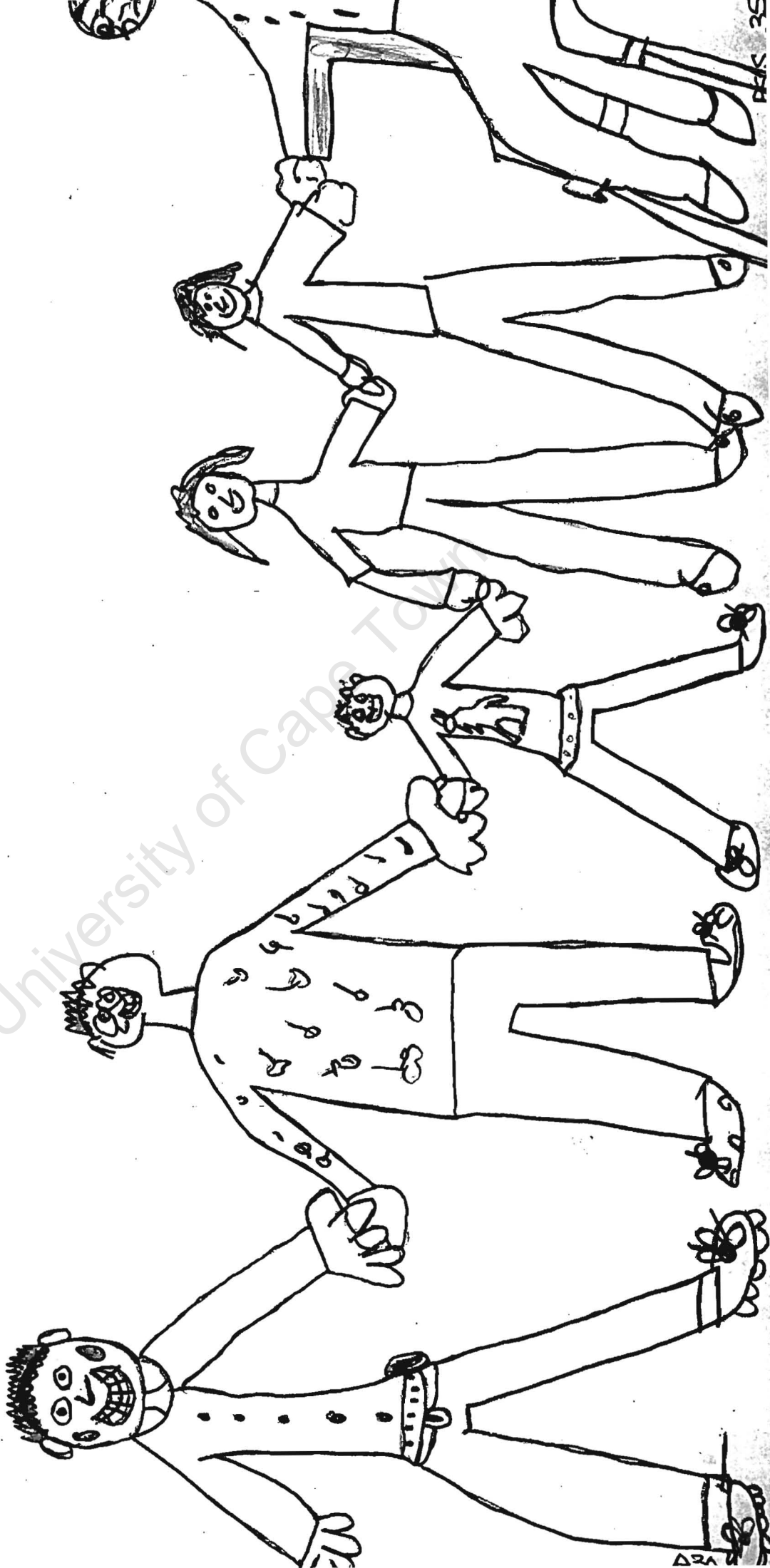


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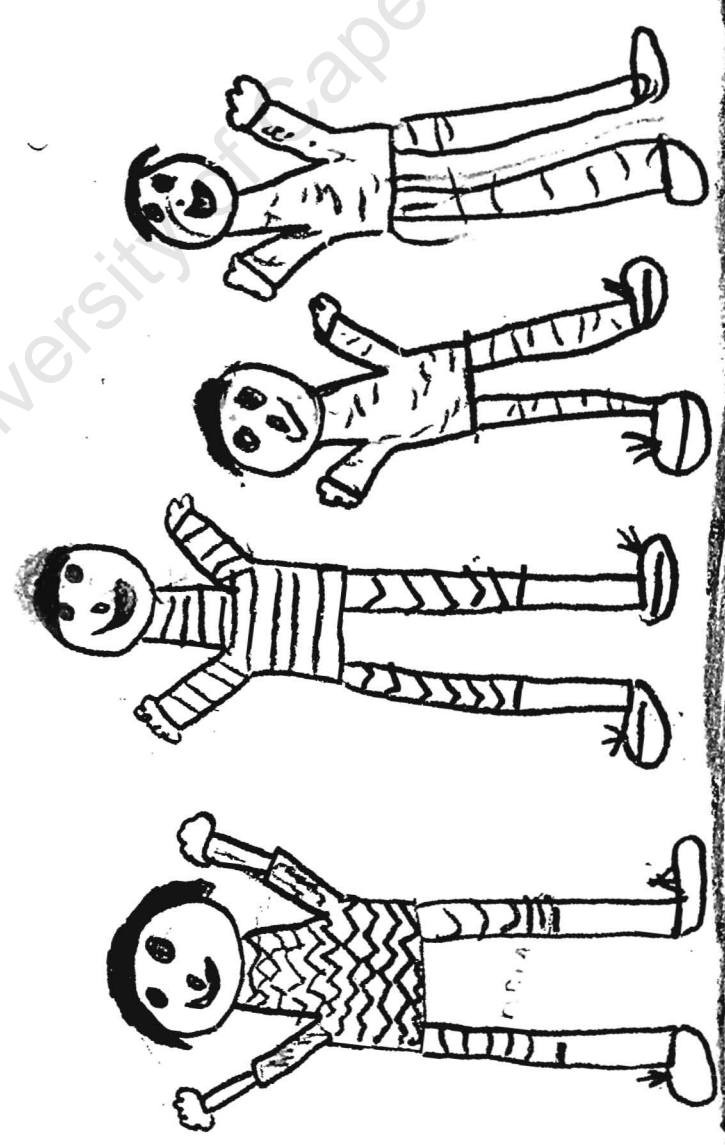


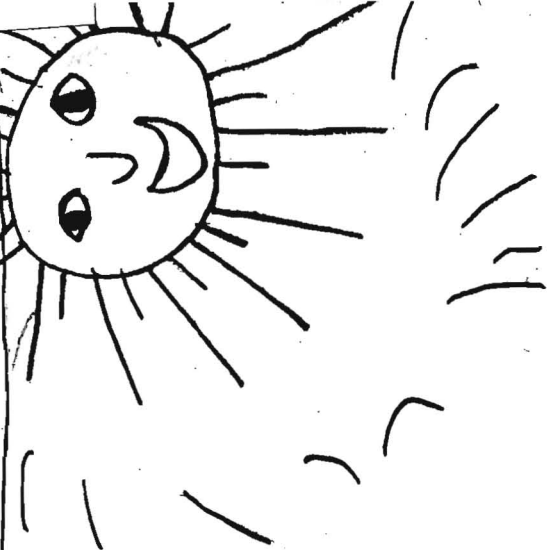
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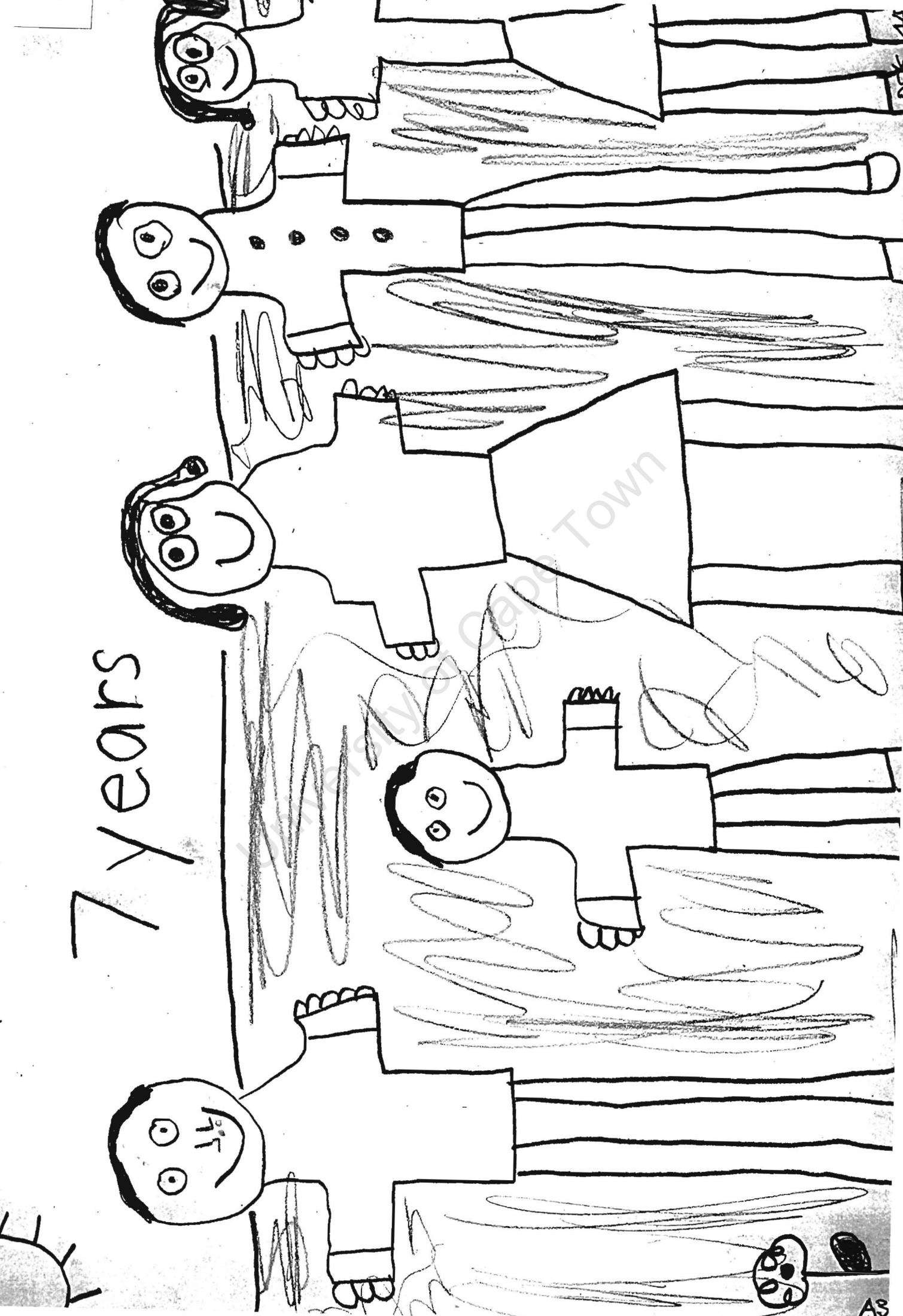


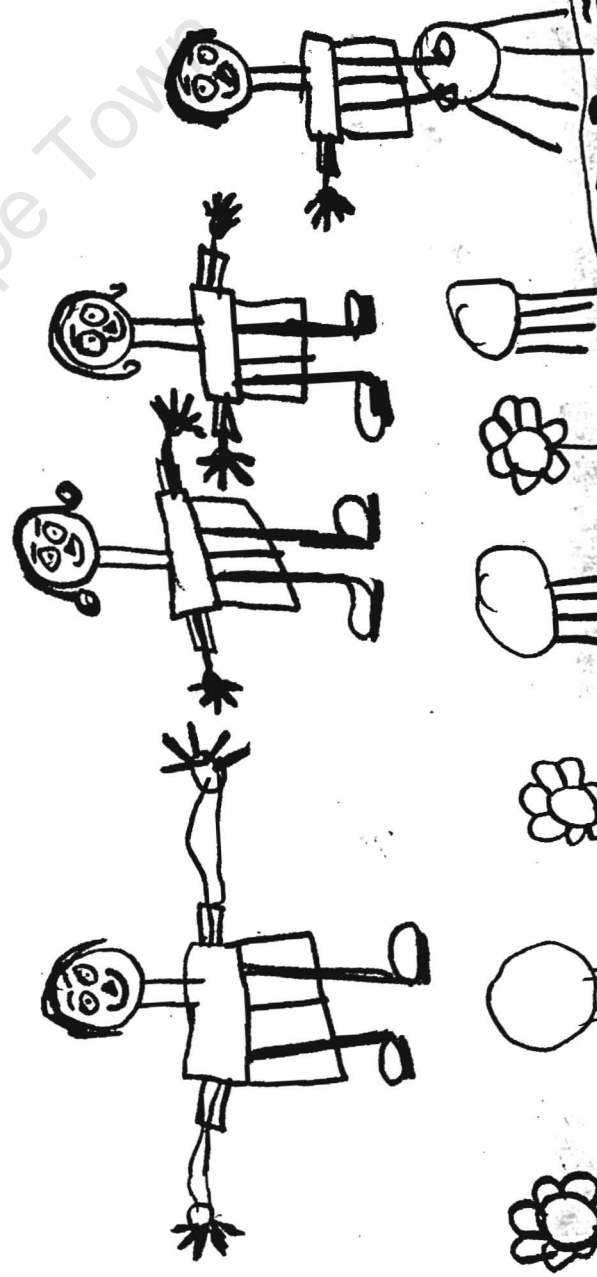
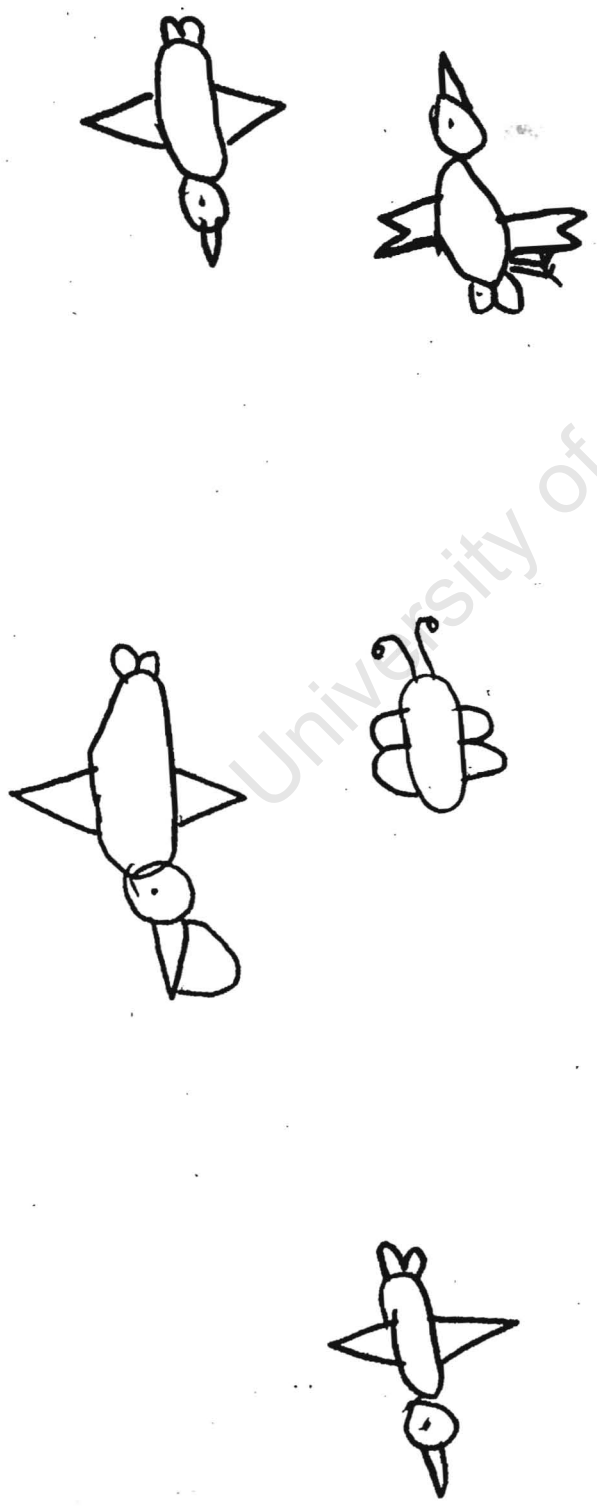


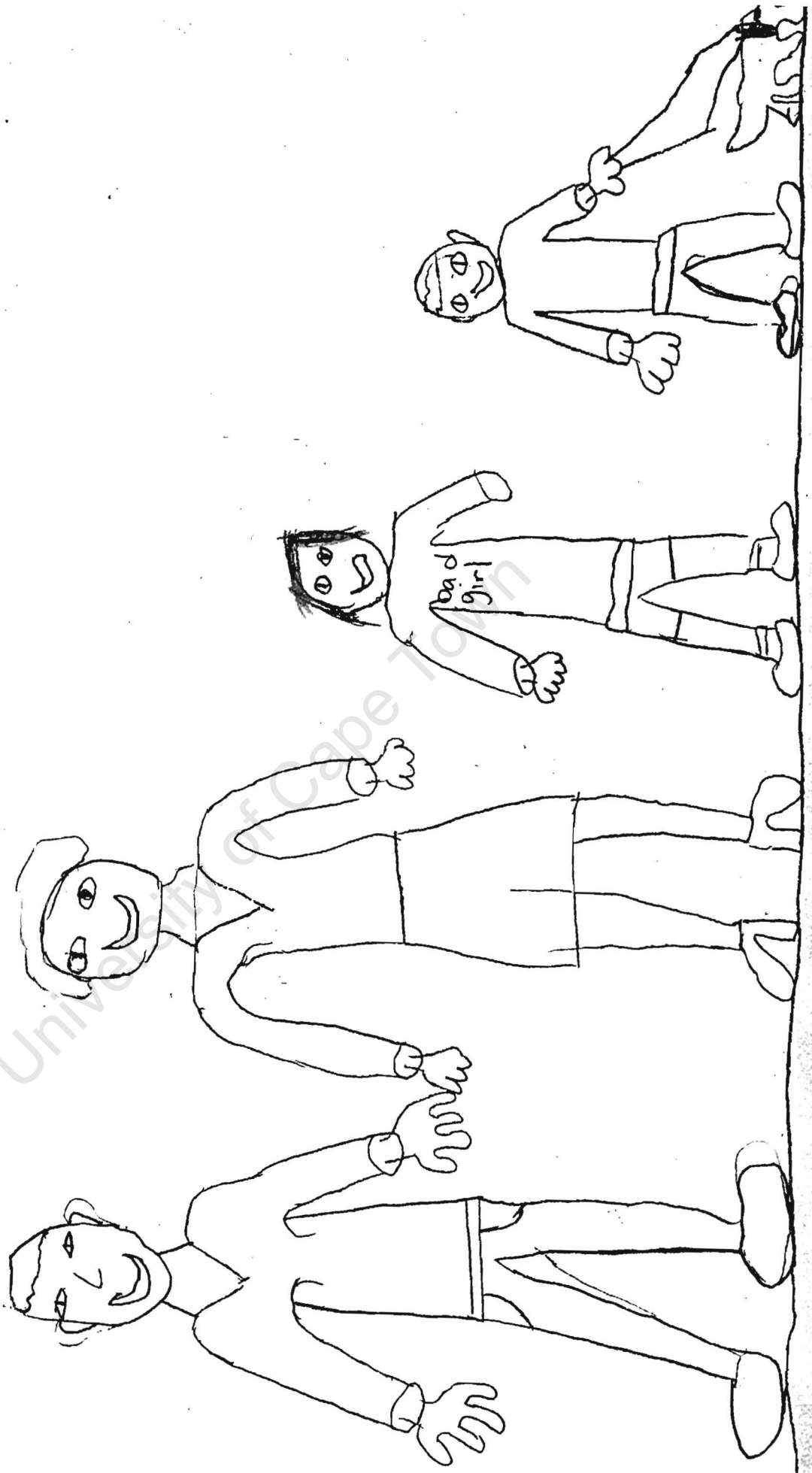
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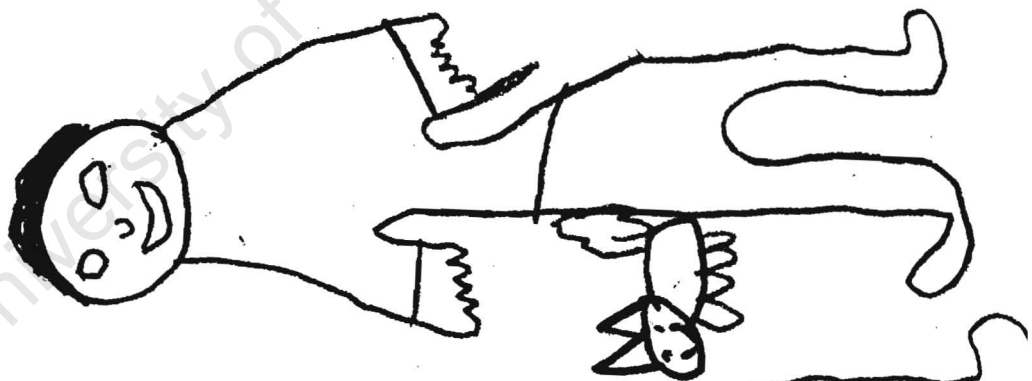
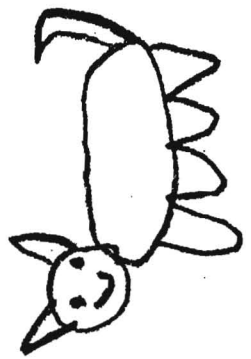
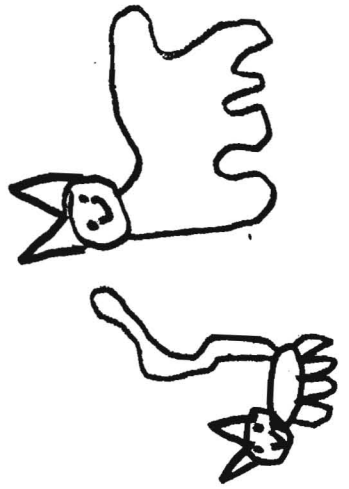
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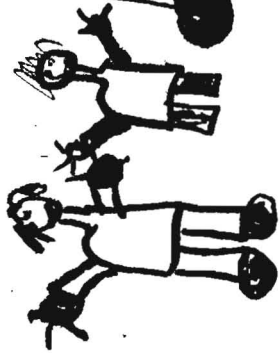
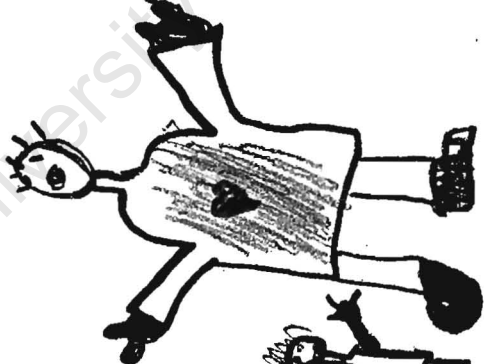
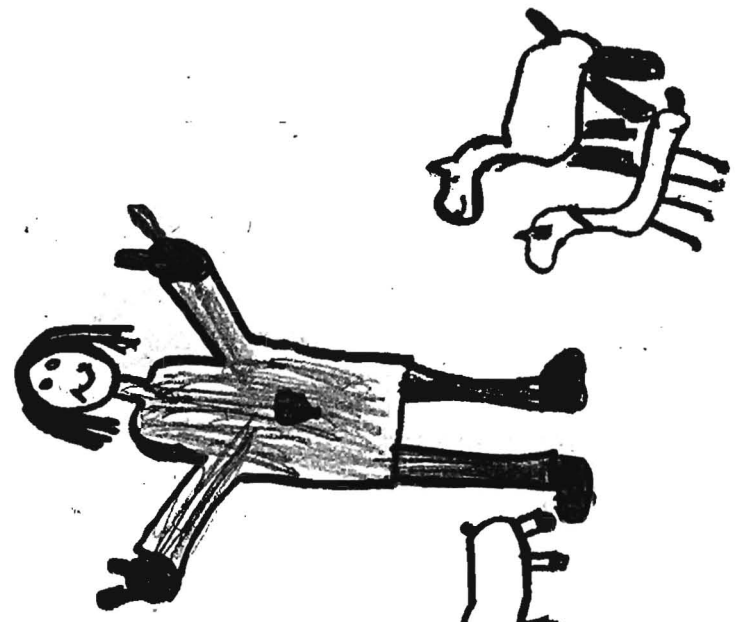


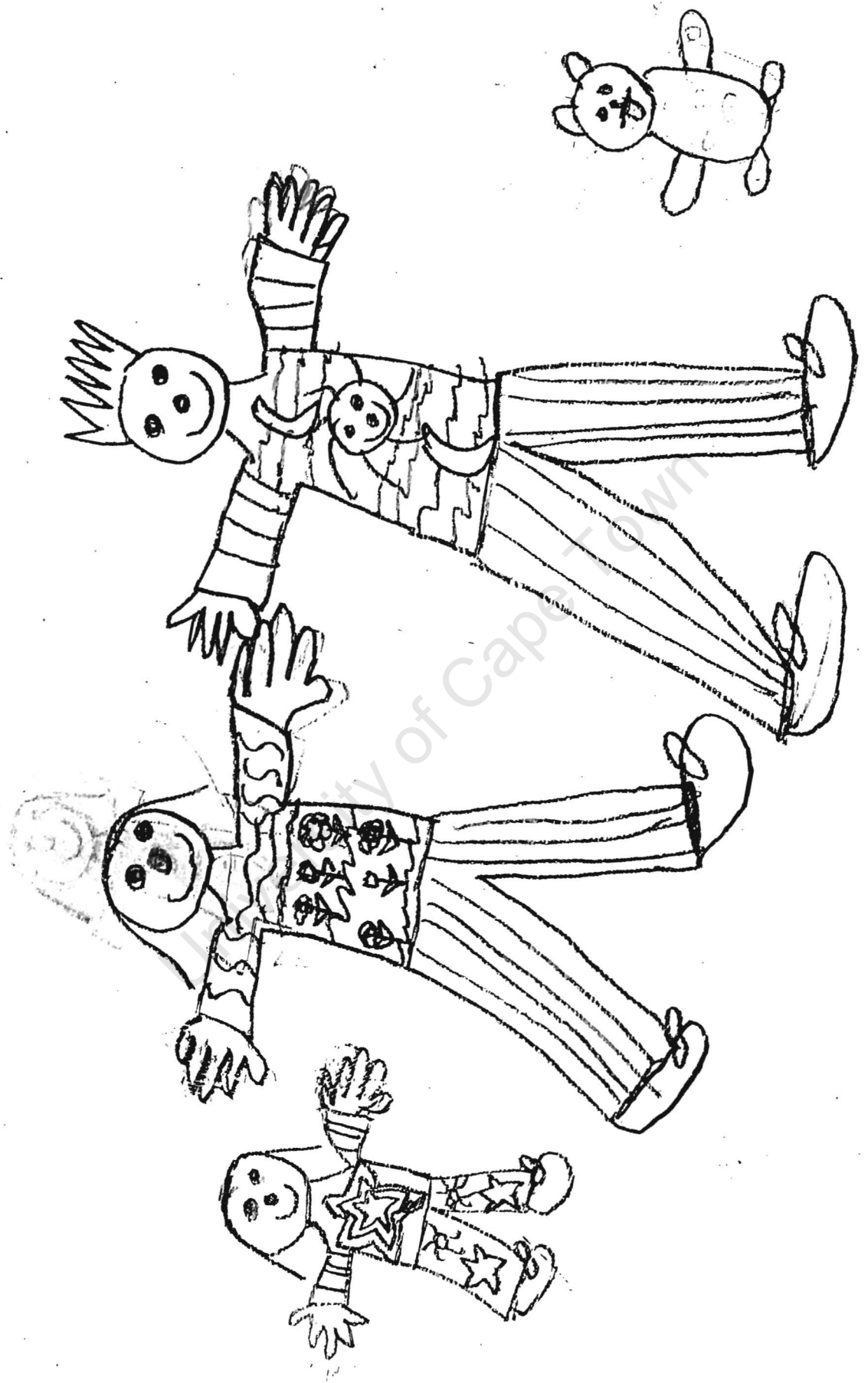


Year 1



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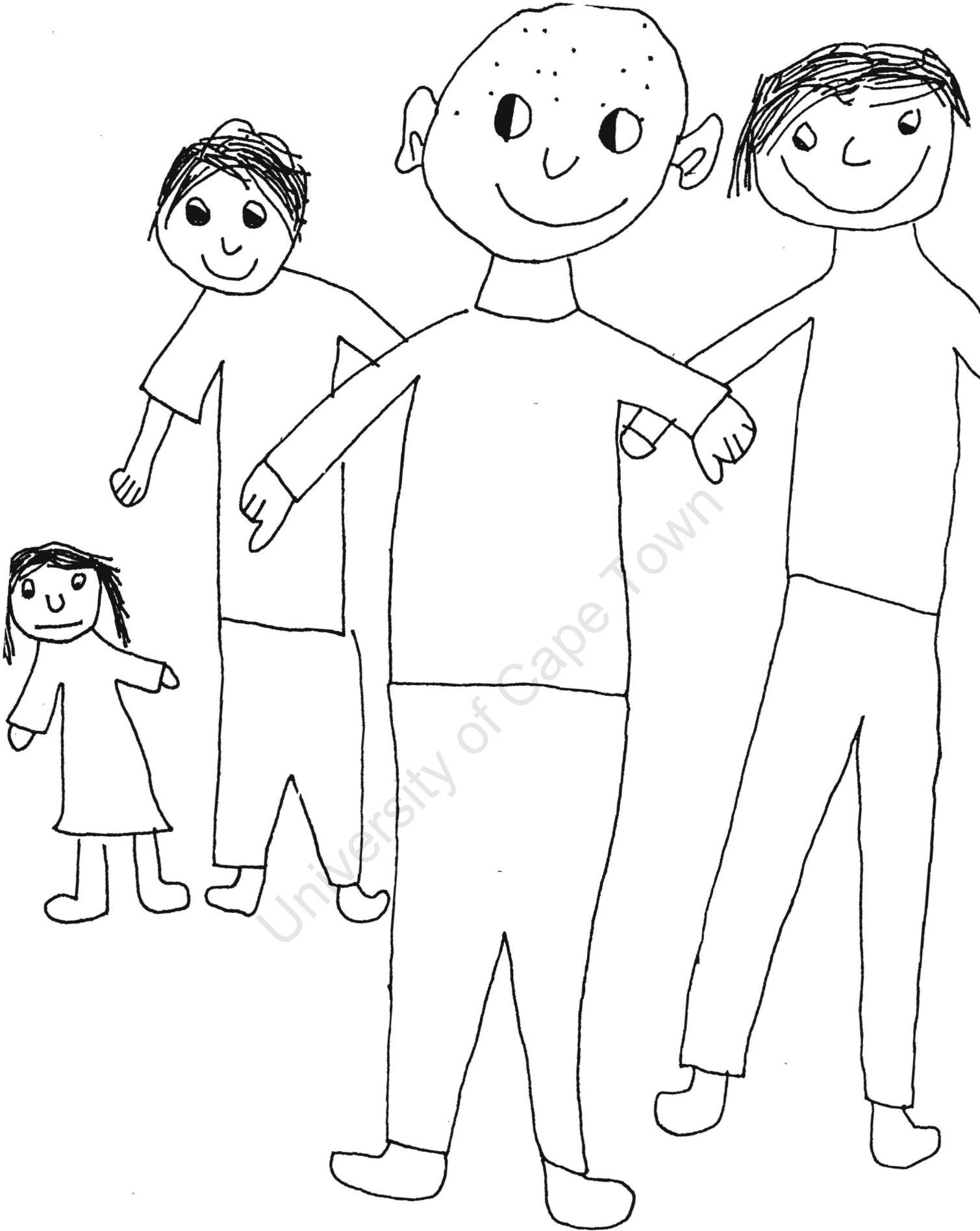


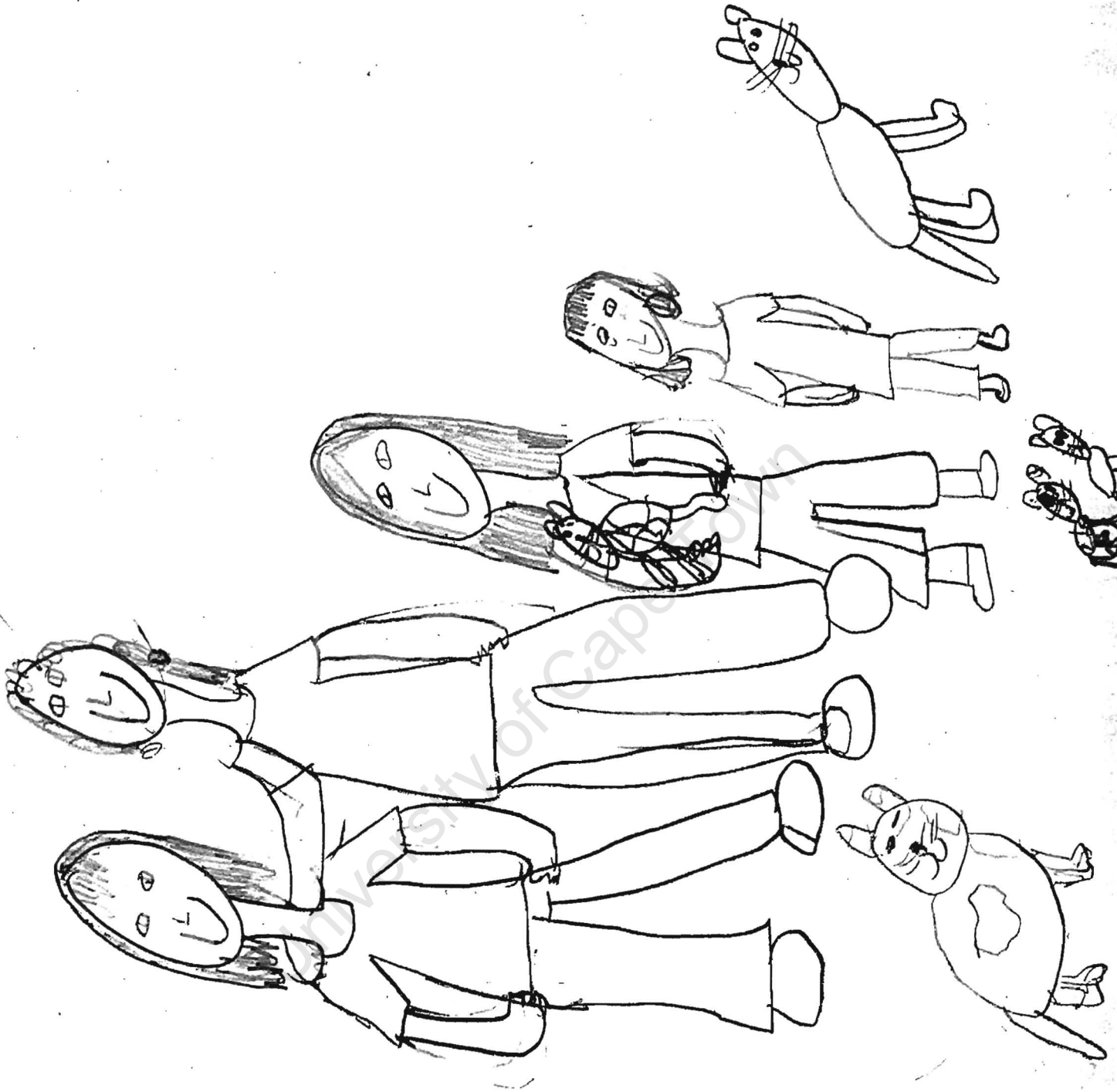


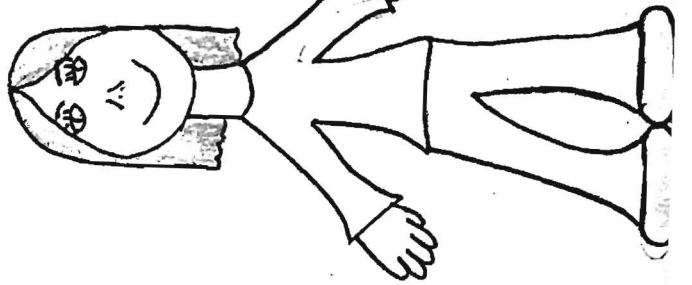
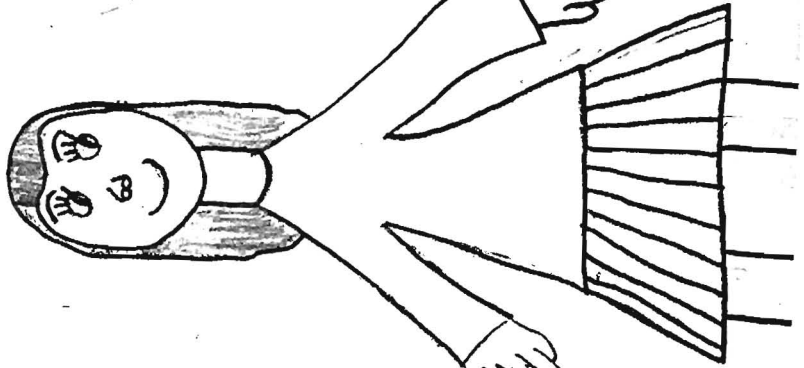
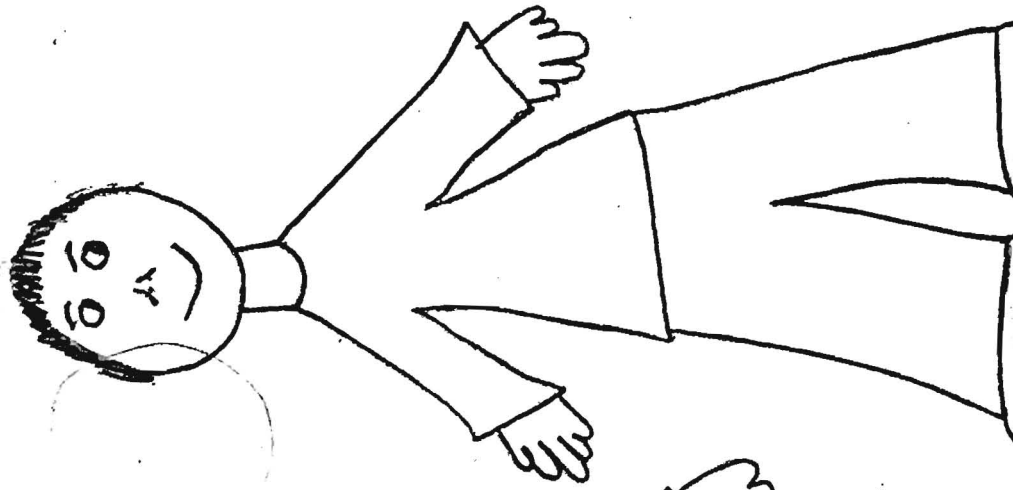
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THE EIGHT-YEAR-OLD DRAWINGS

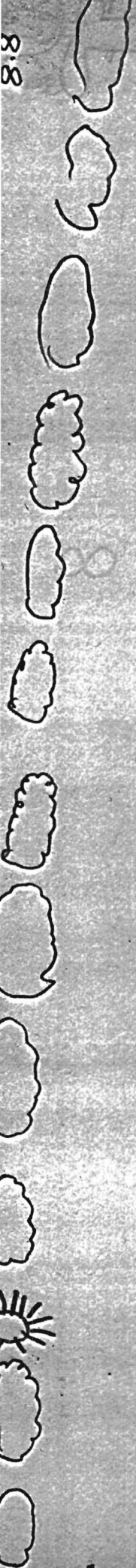
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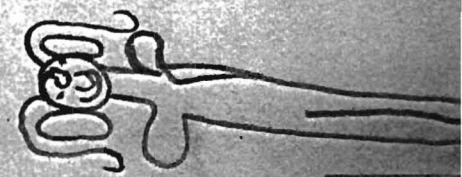
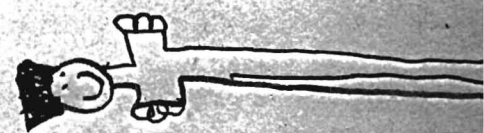
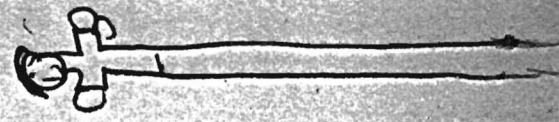




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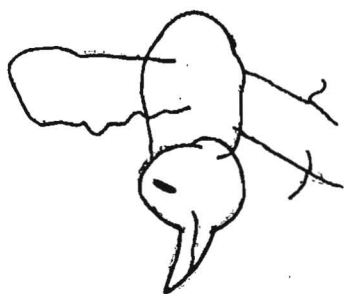


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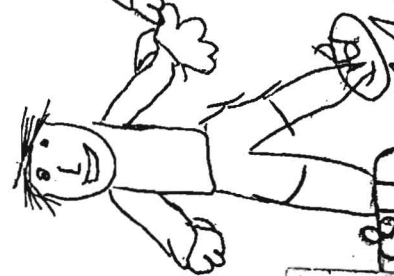
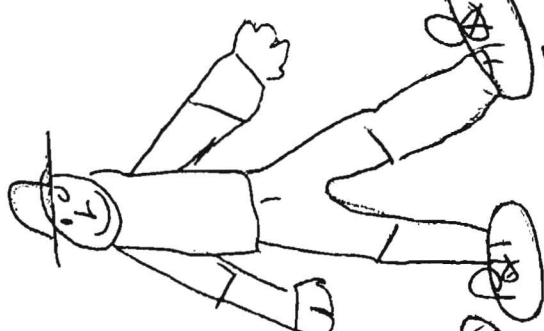
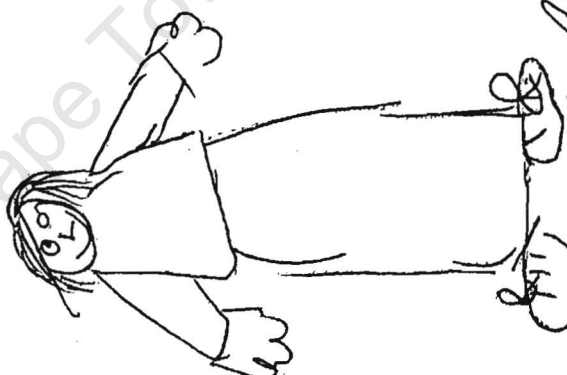
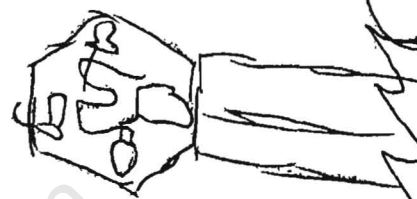


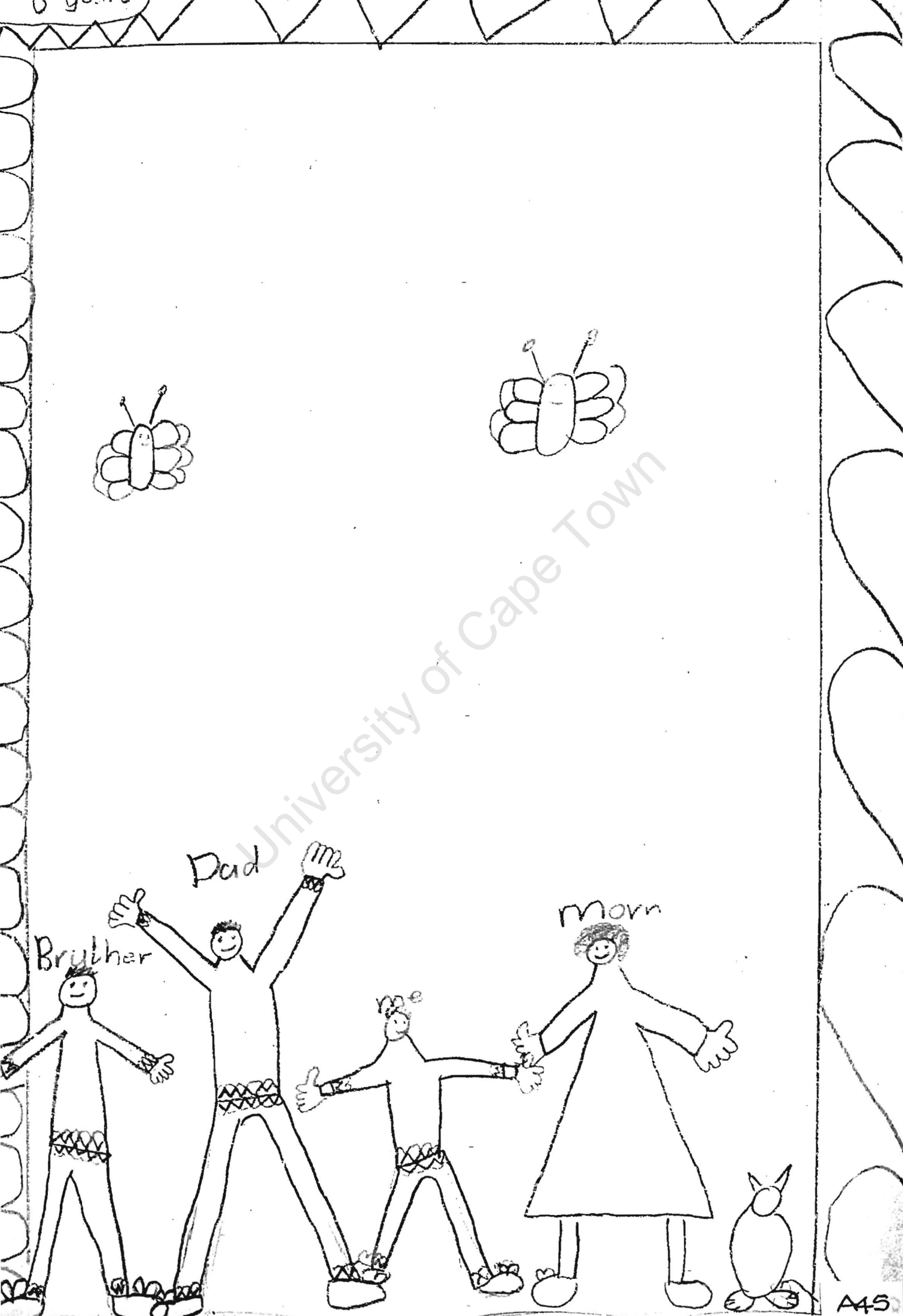
Age 8 years

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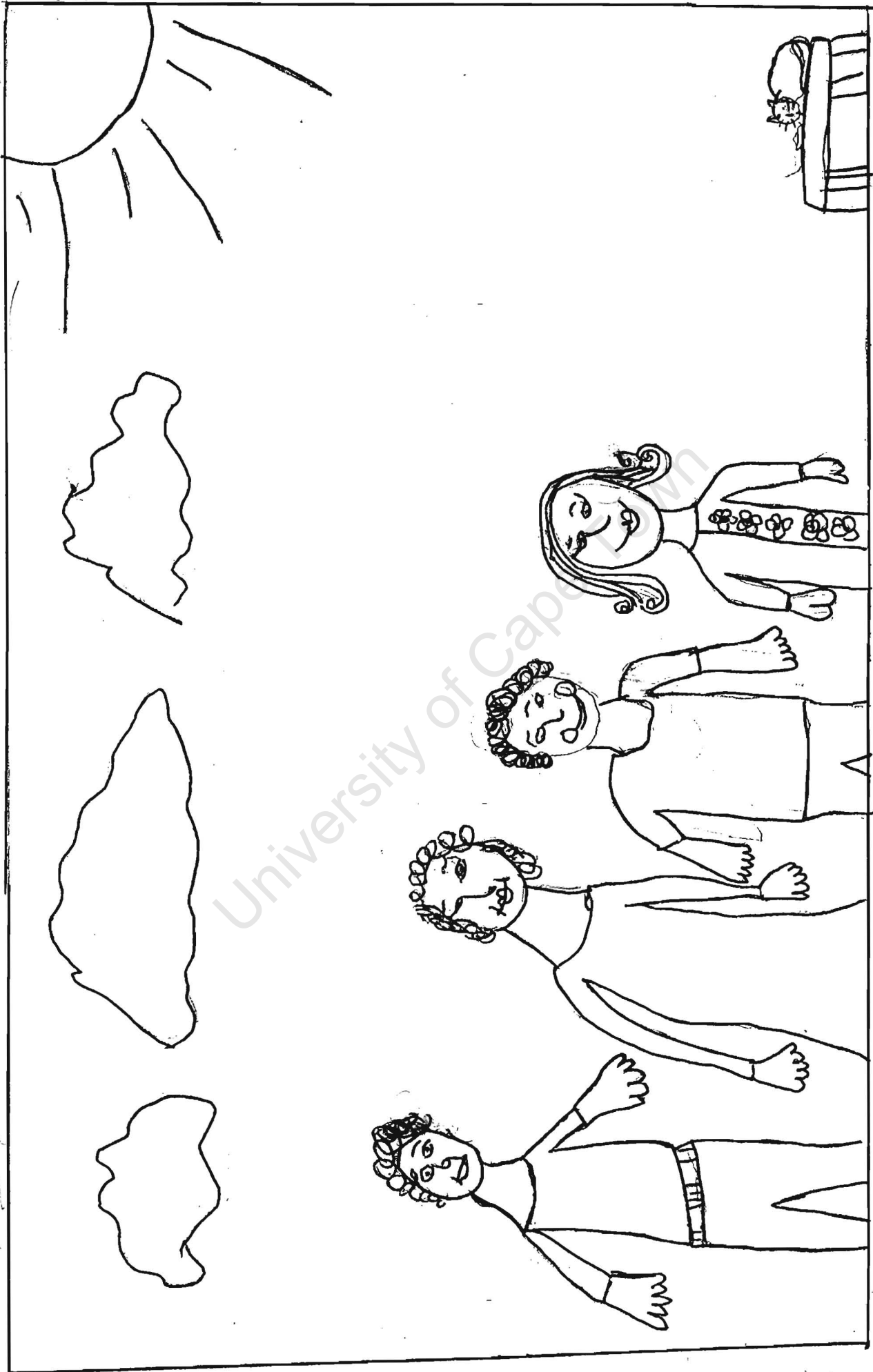


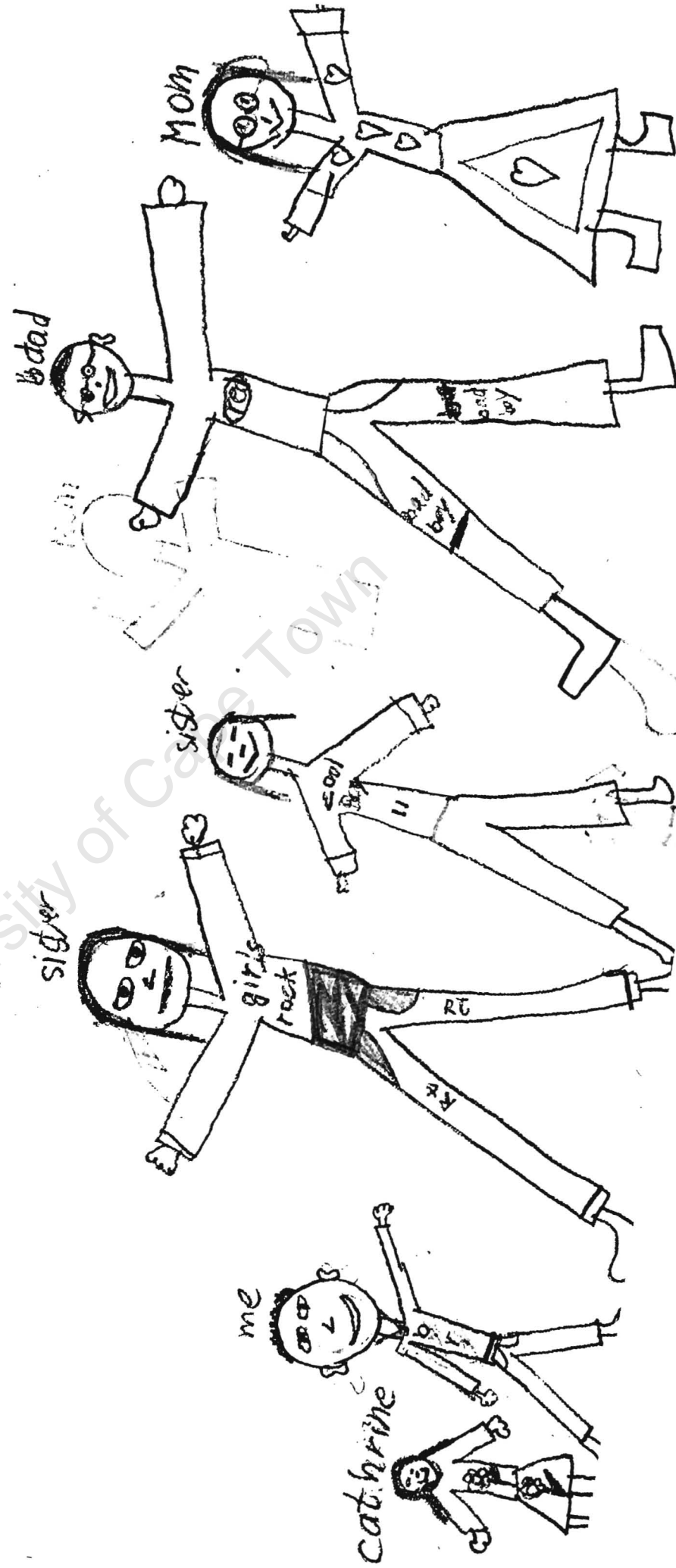
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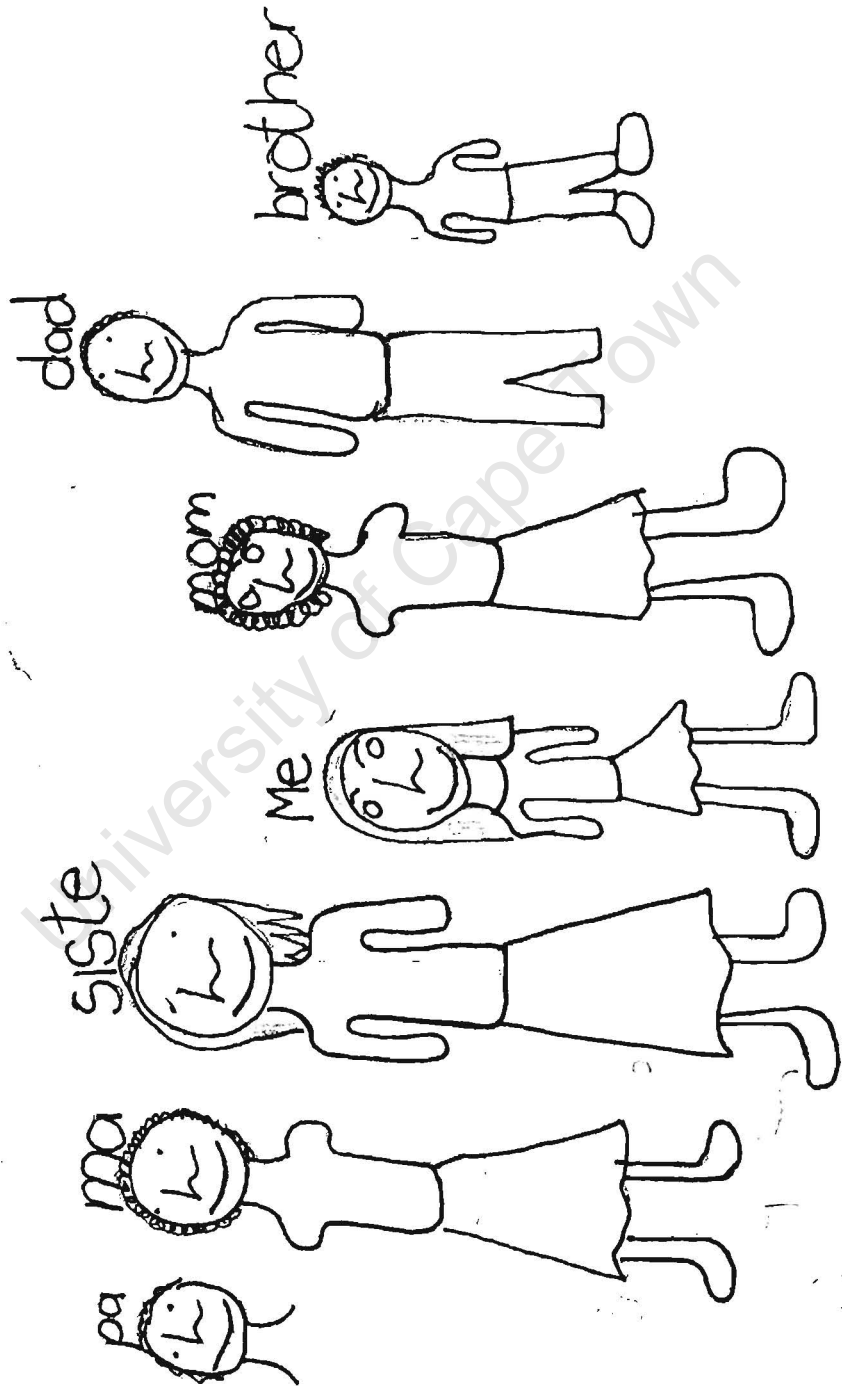
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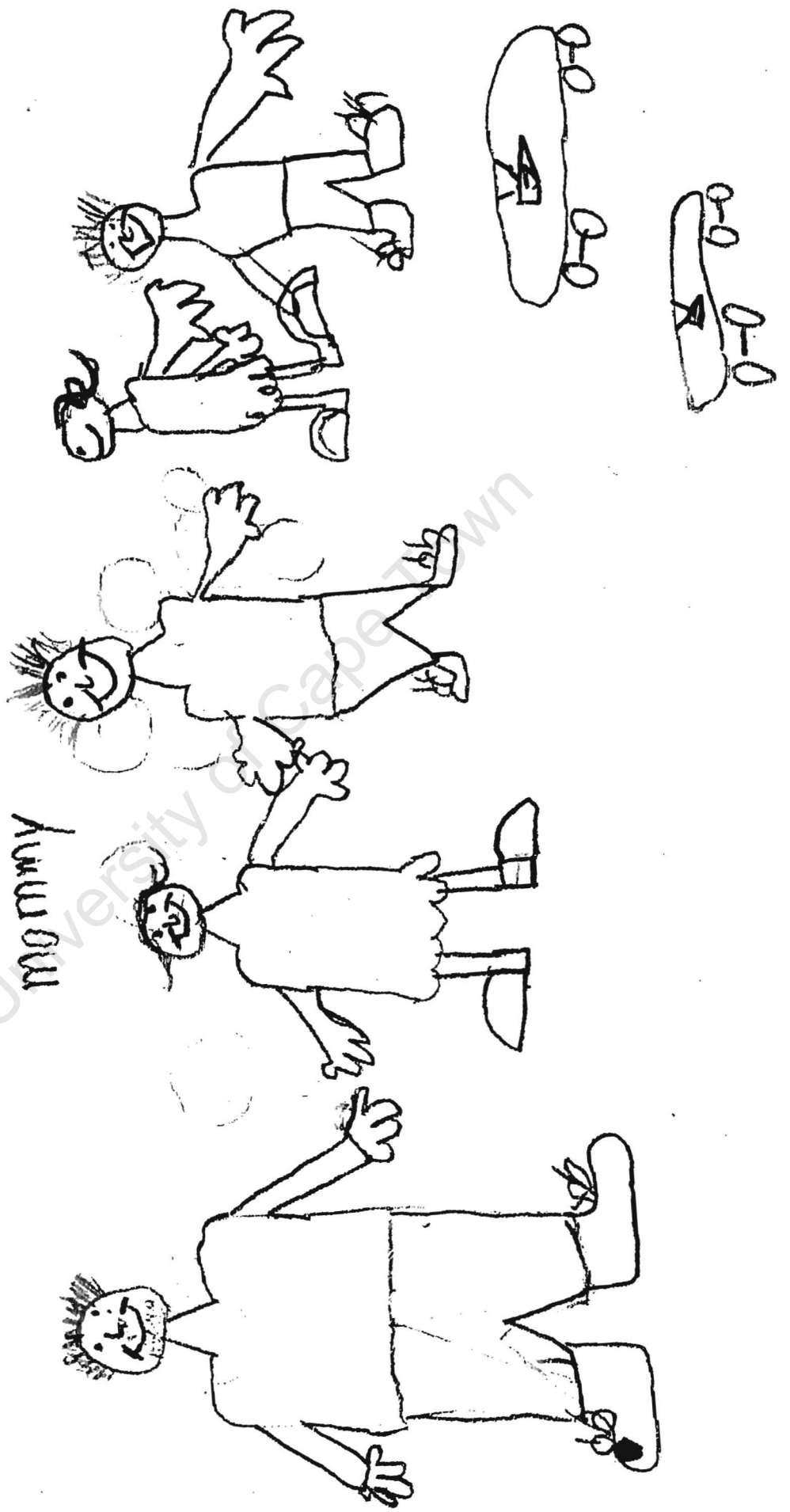
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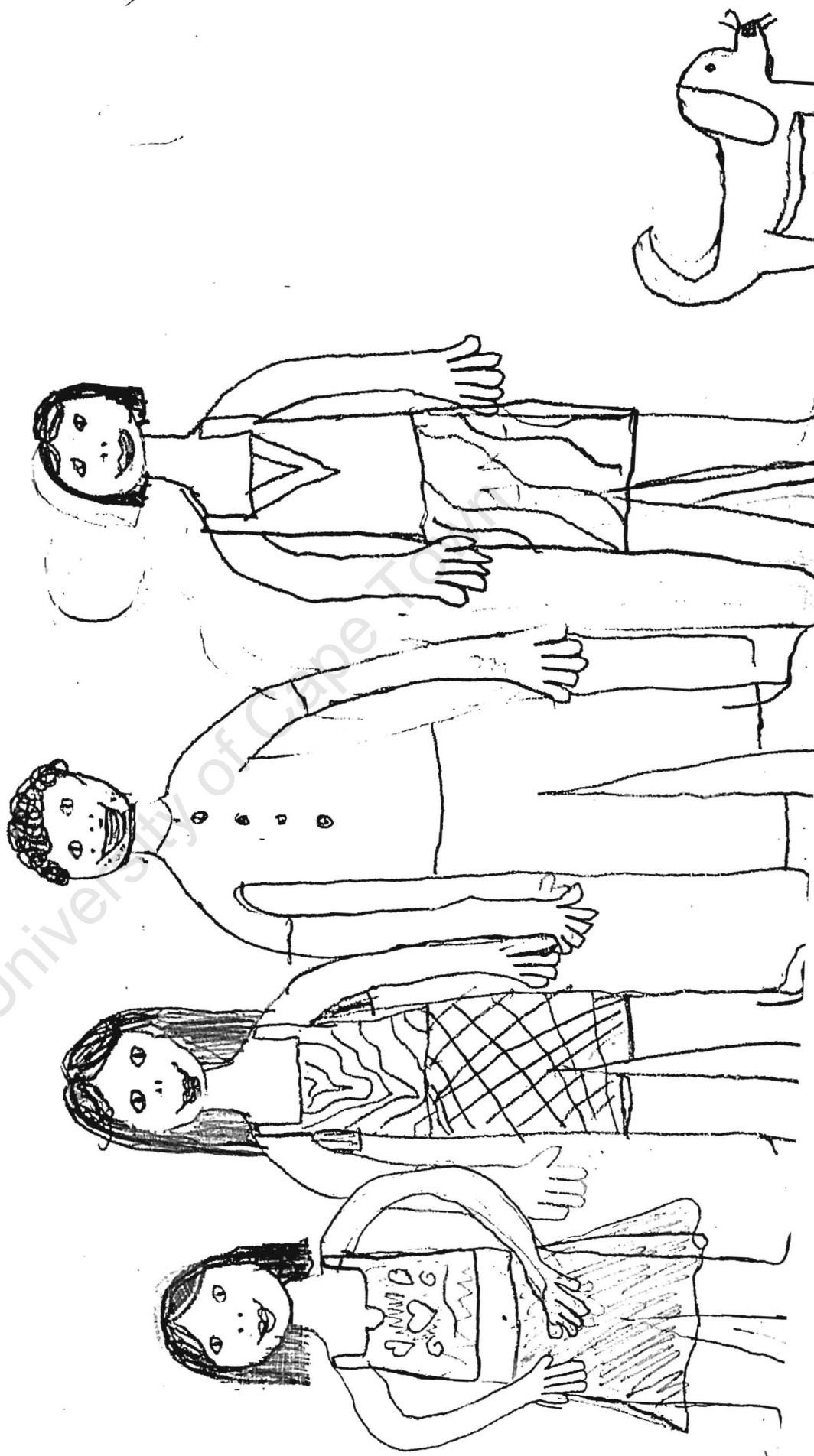




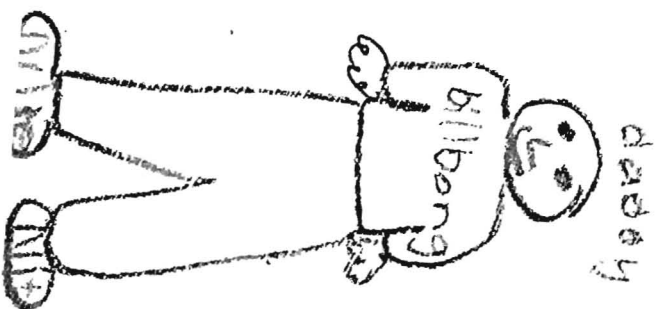


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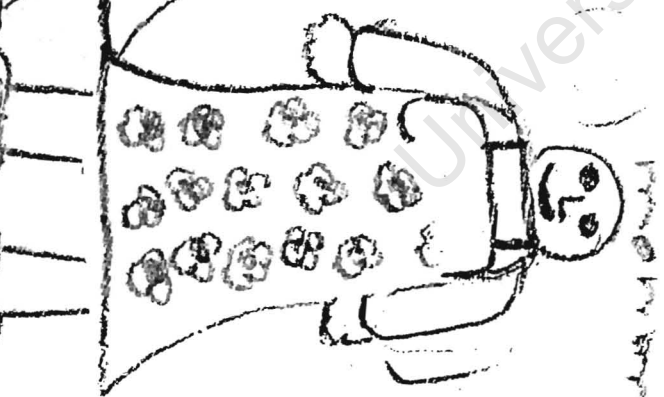
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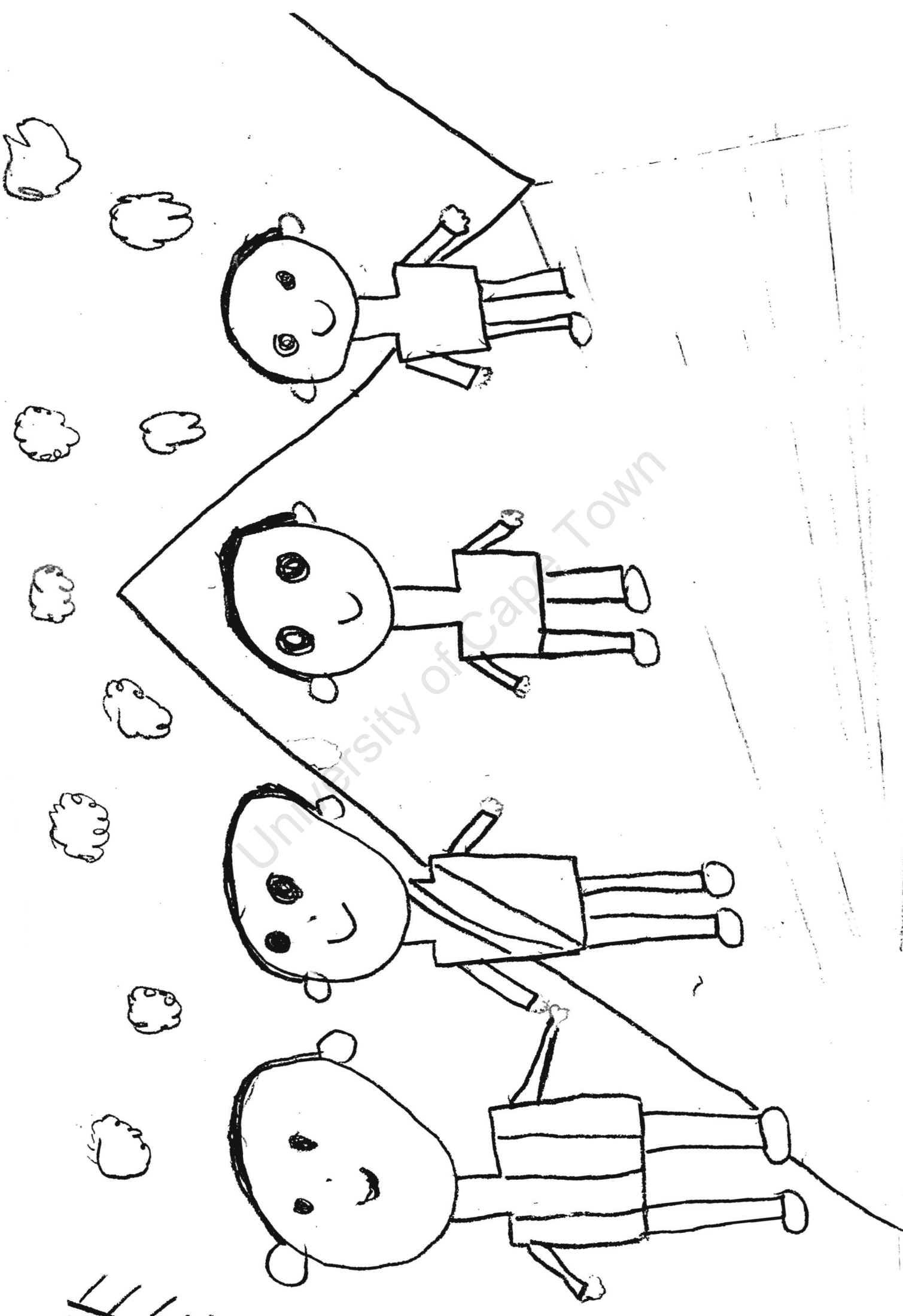


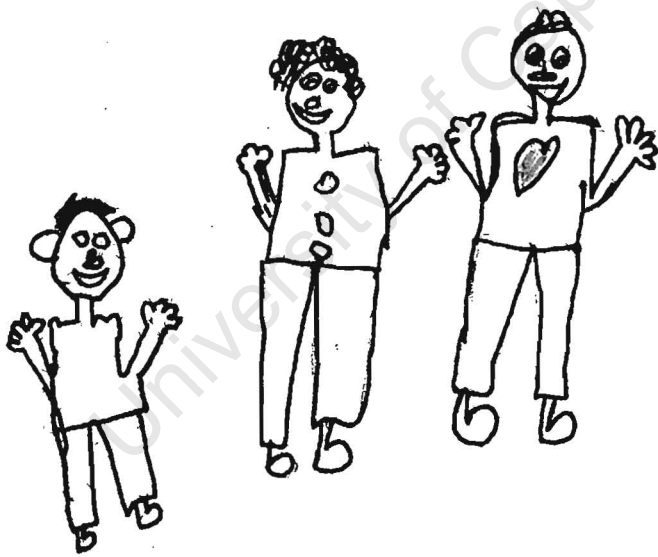
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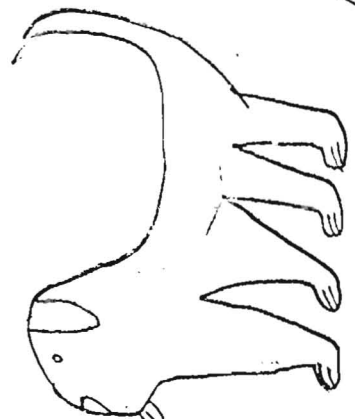
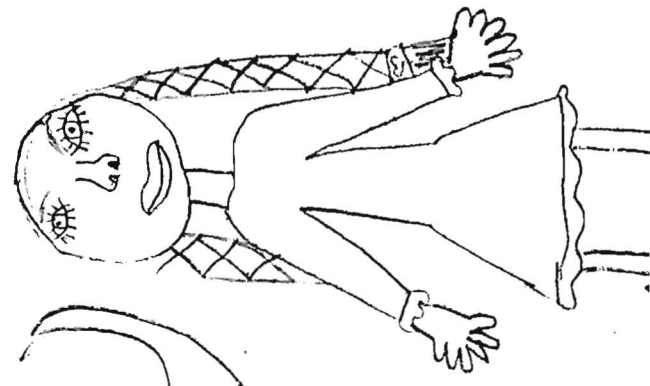
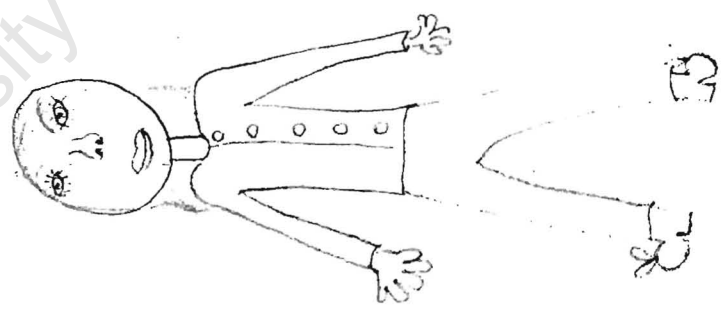
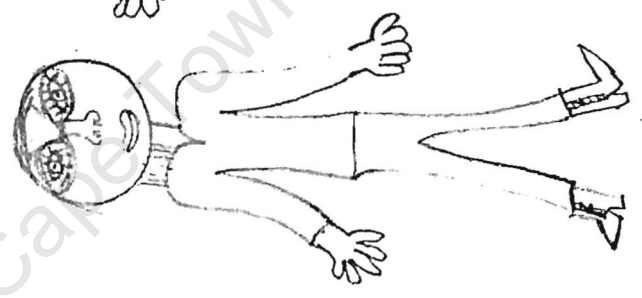
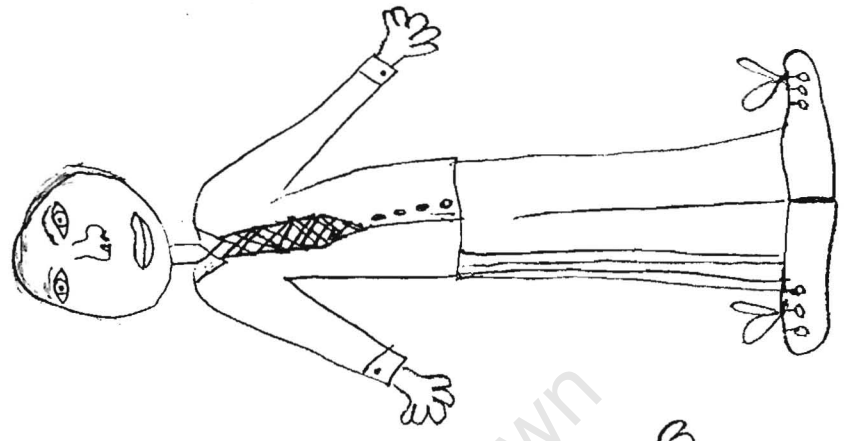


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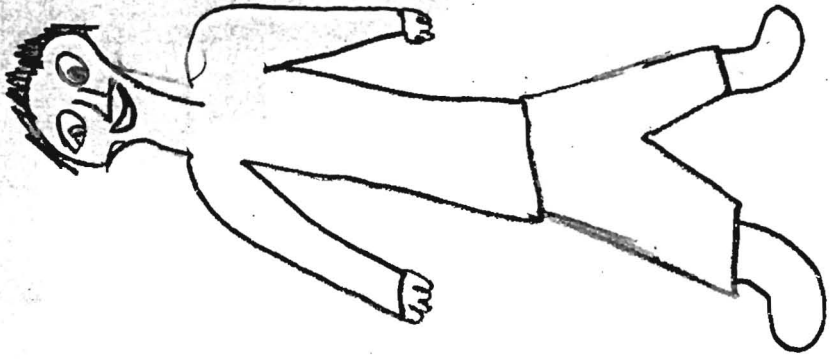




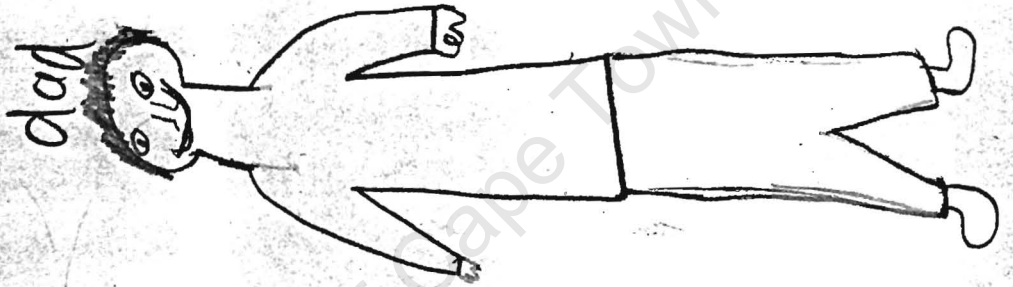


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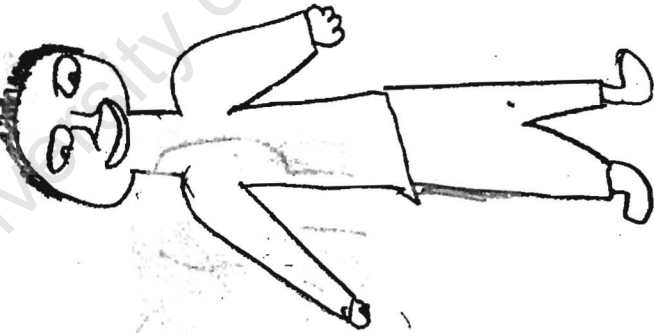
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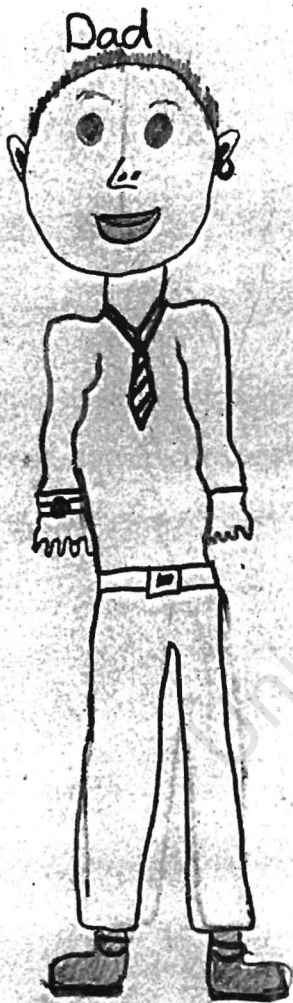


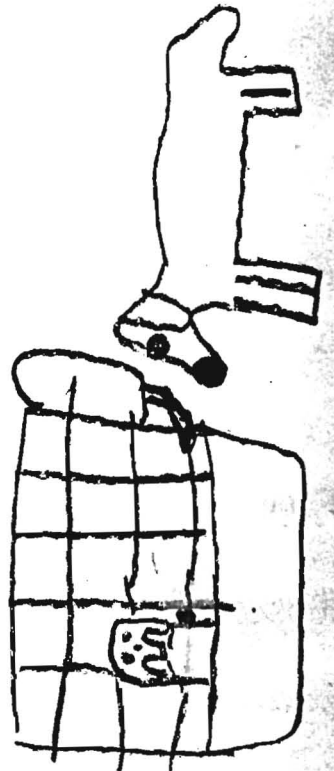
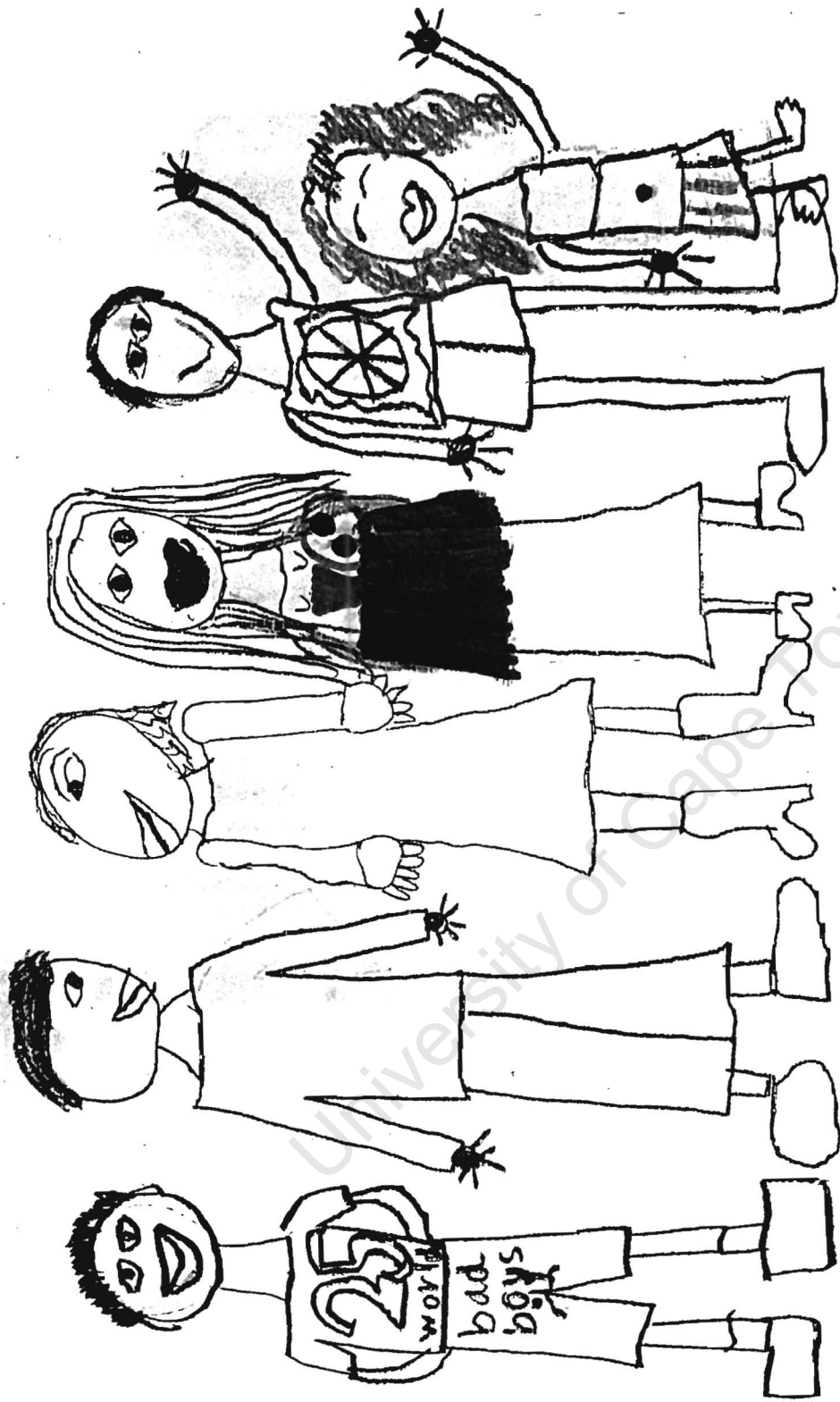
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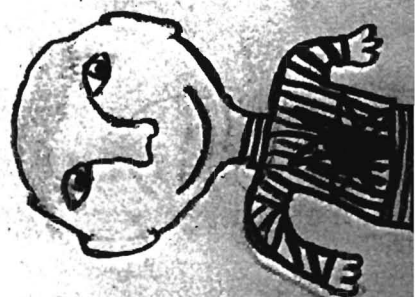


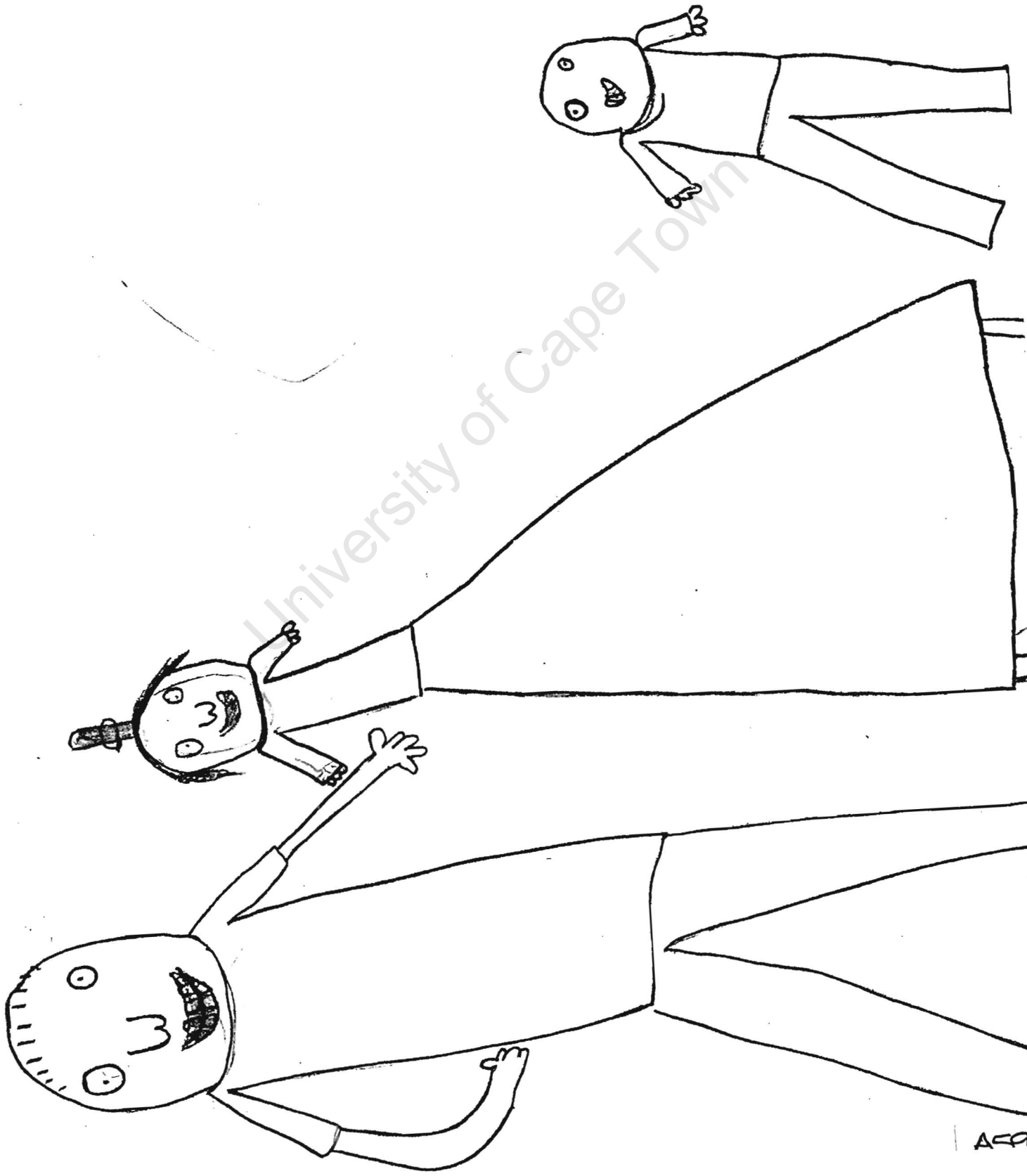


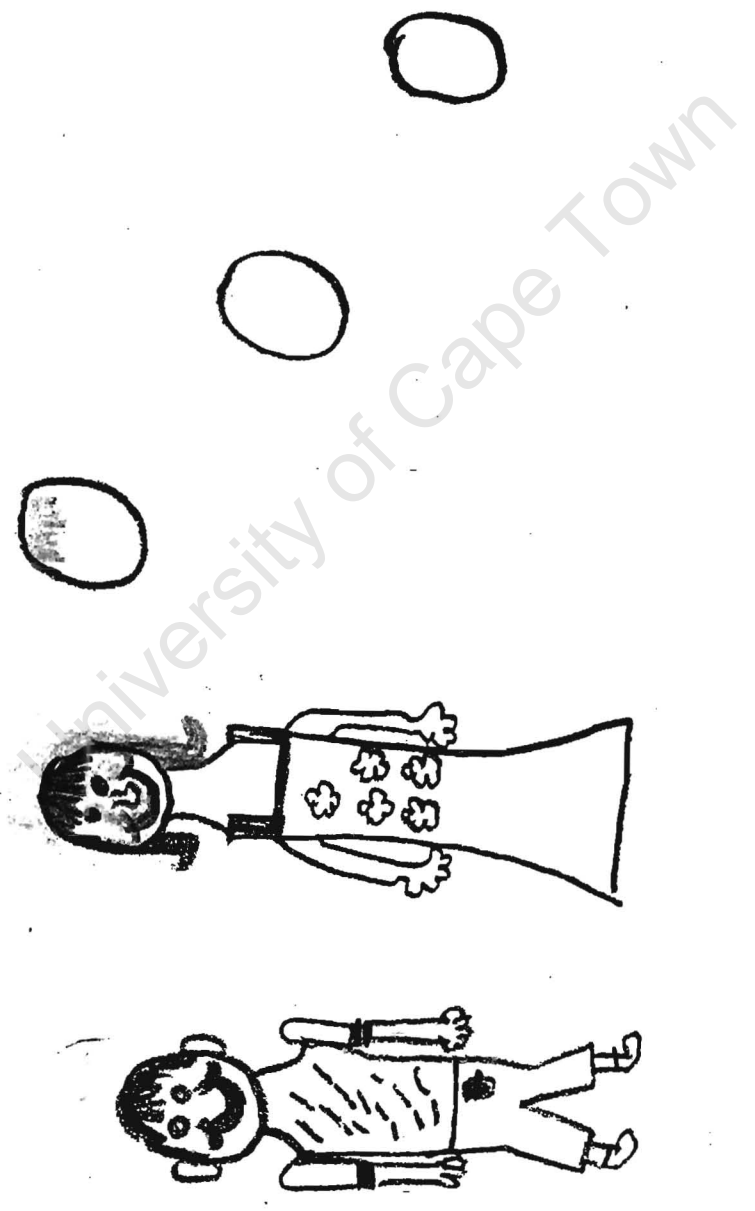


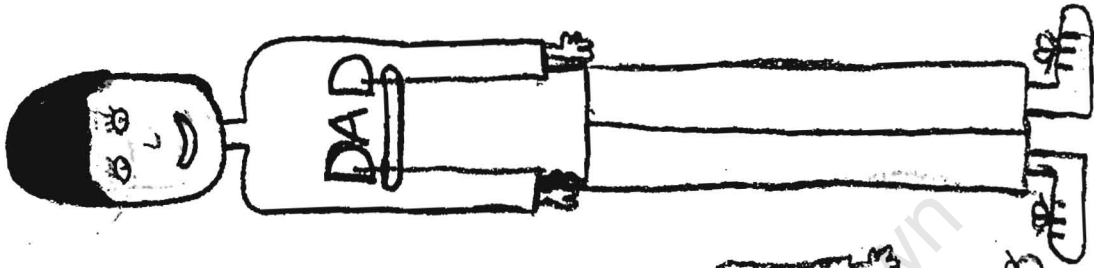
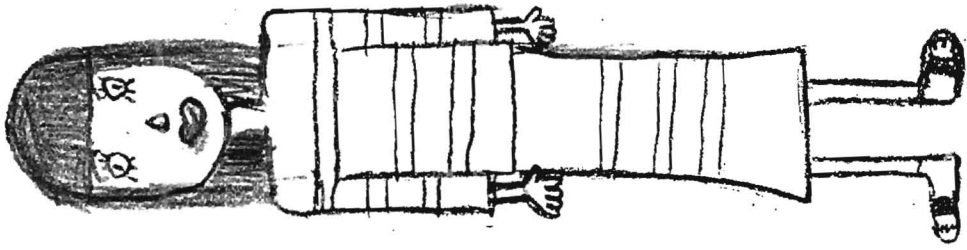
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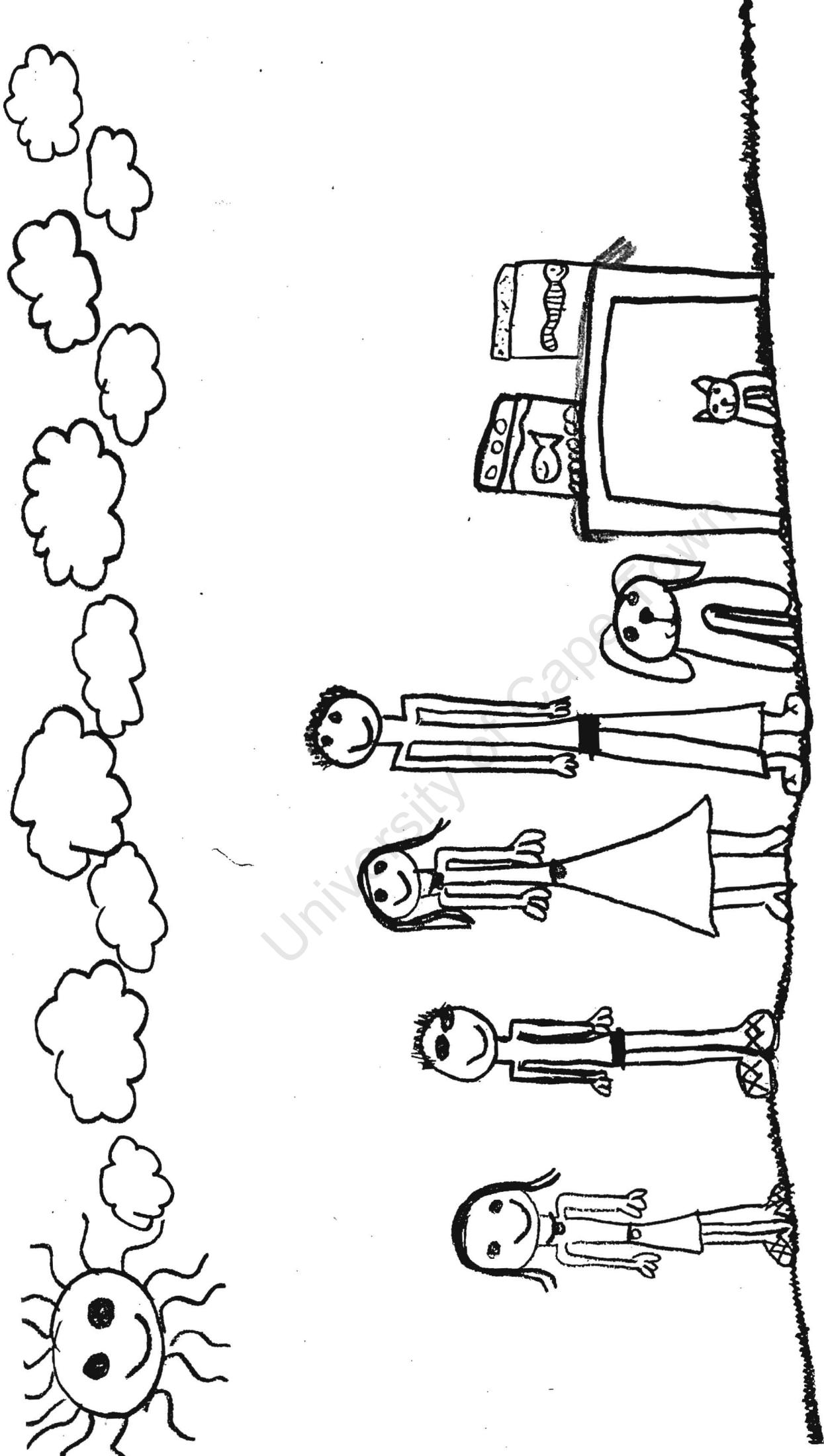


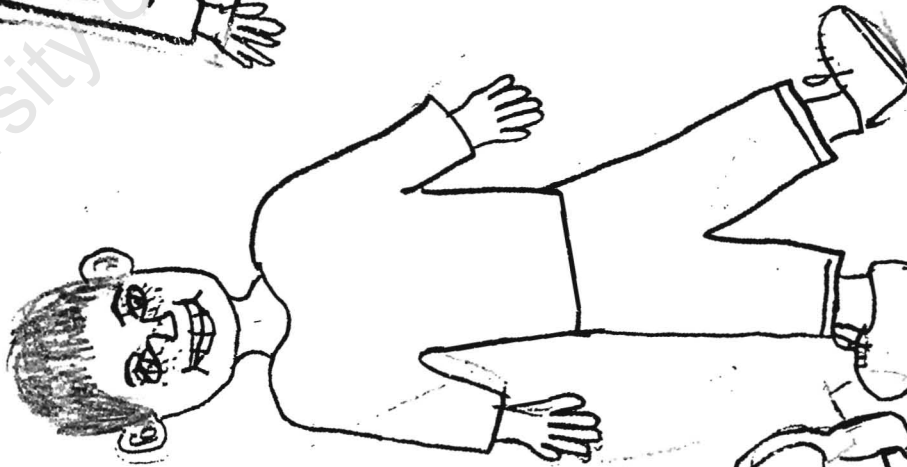
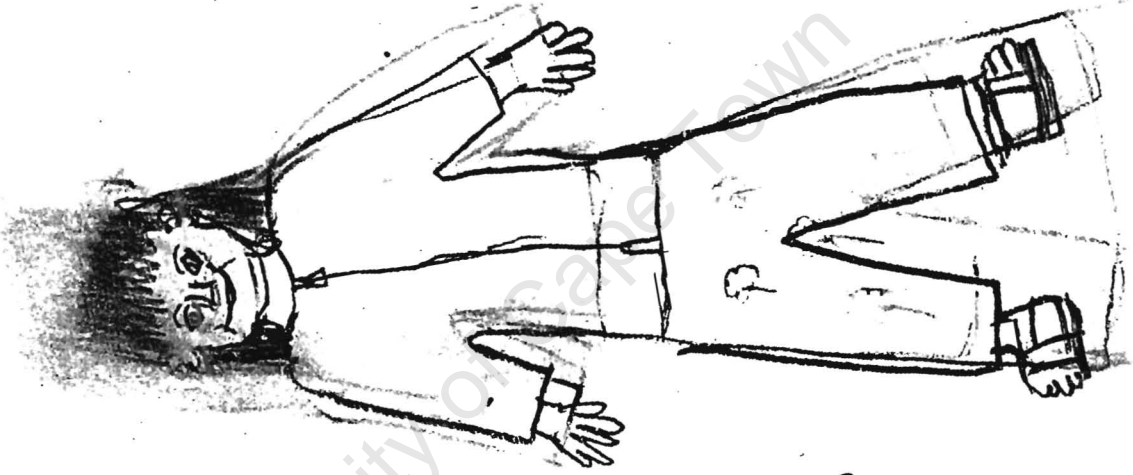
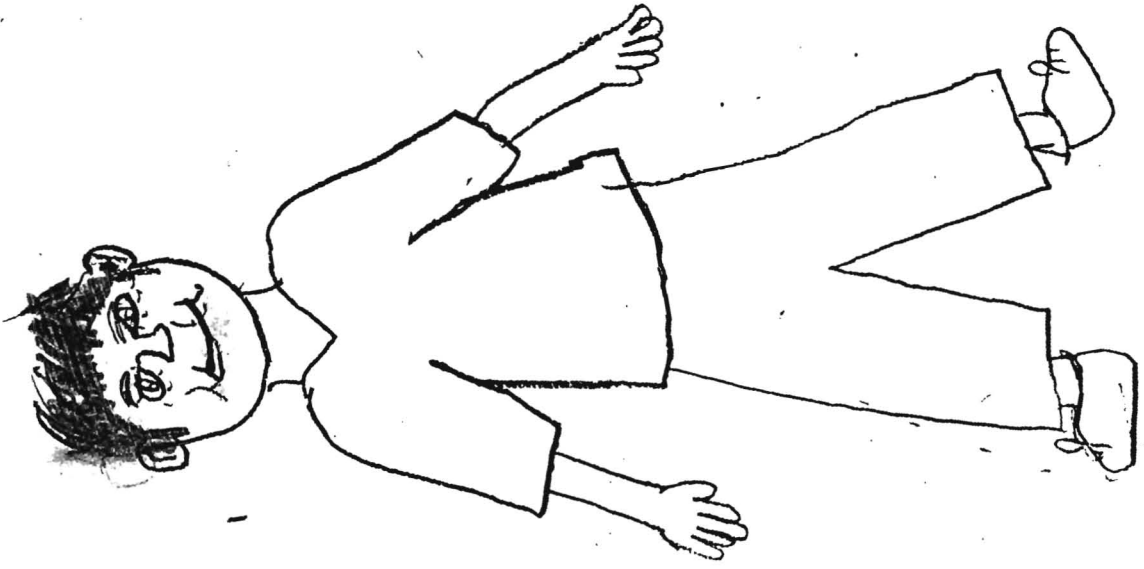


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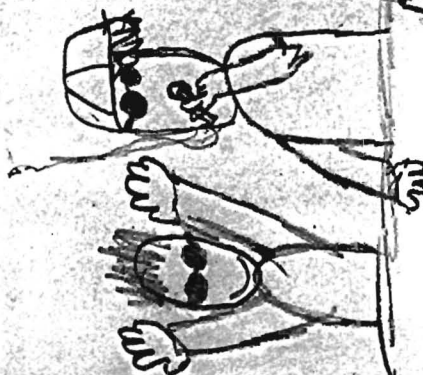
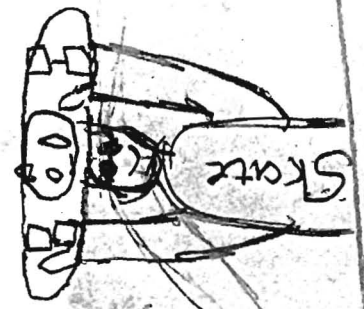
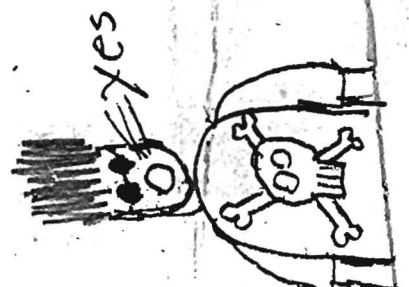
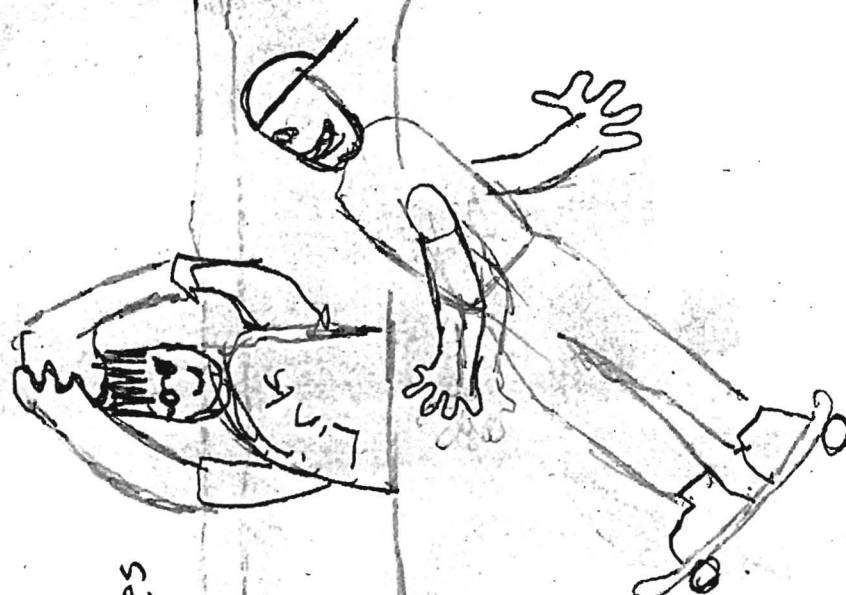




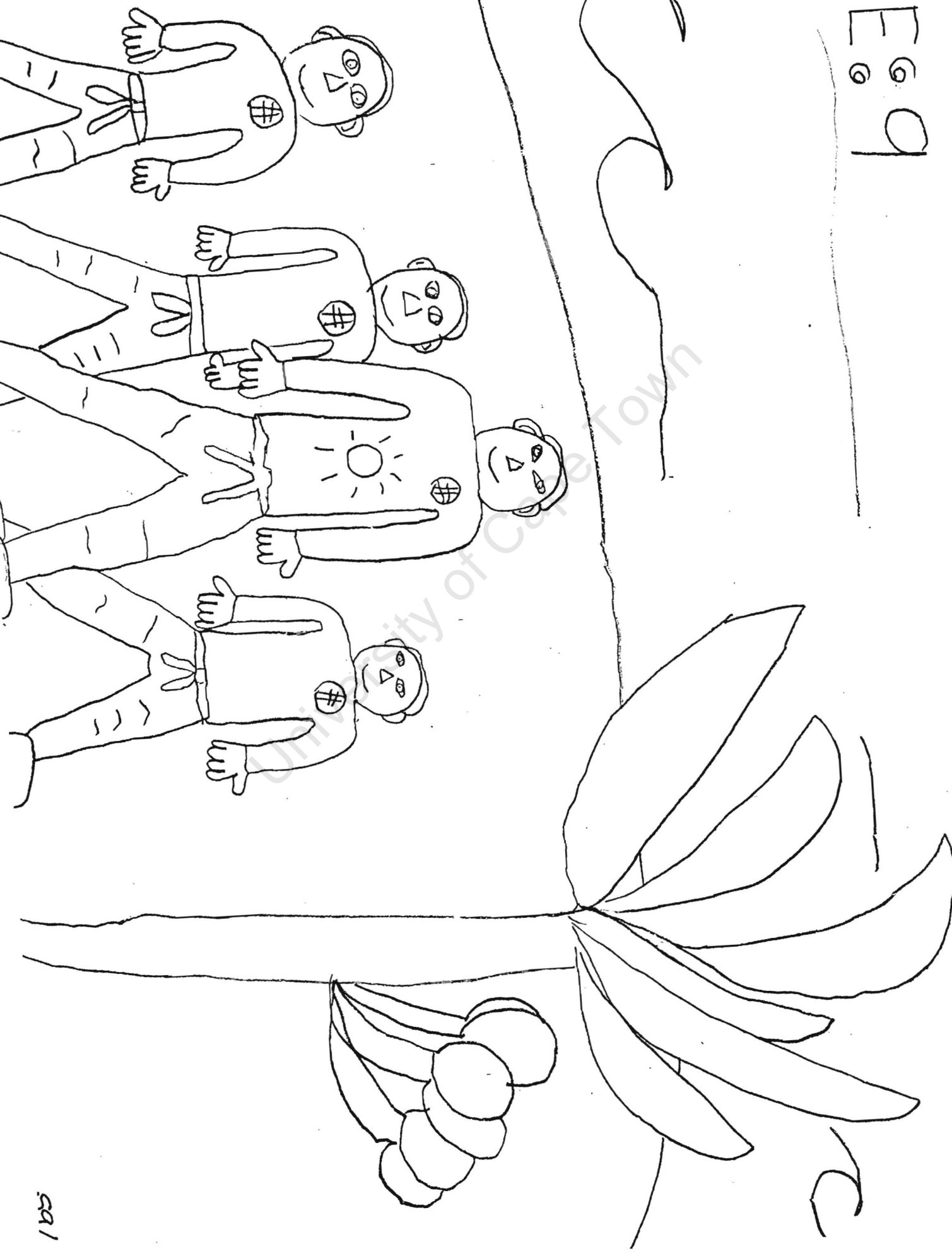
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THE NINE-YEAR-OLD DRAWINGS

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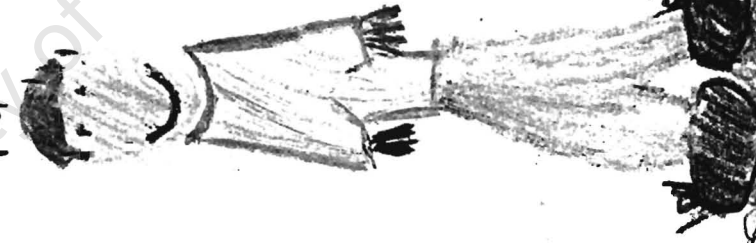
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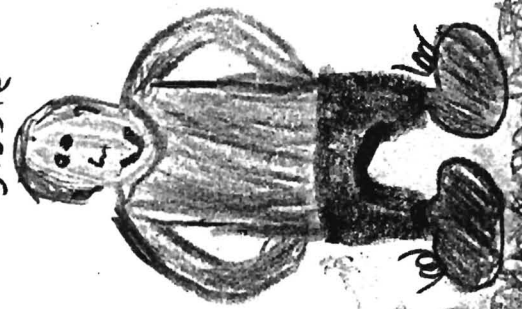




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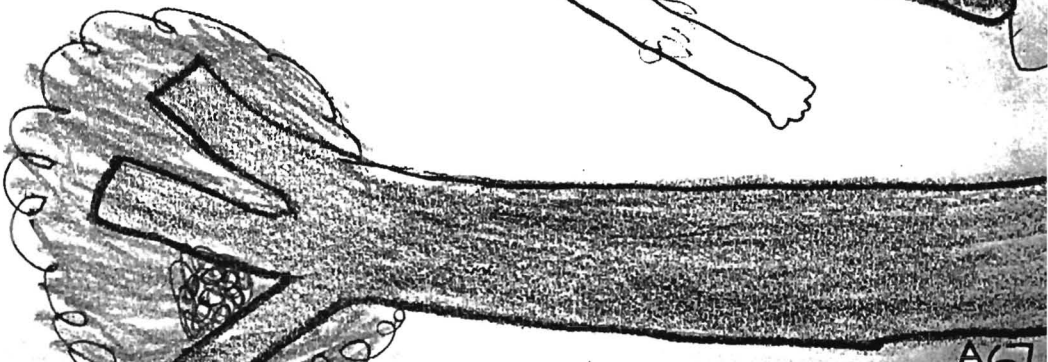
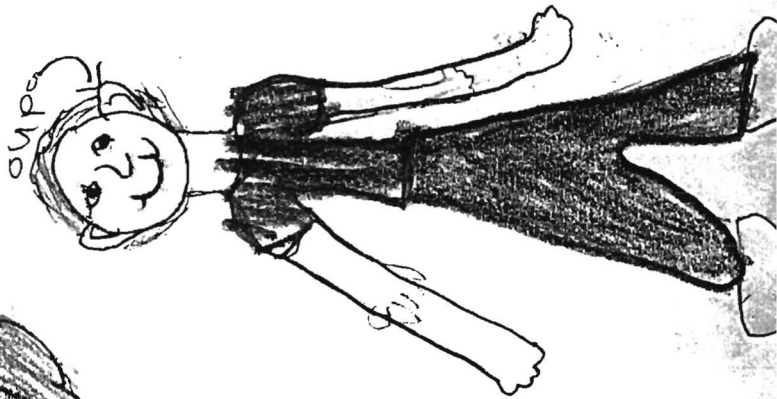
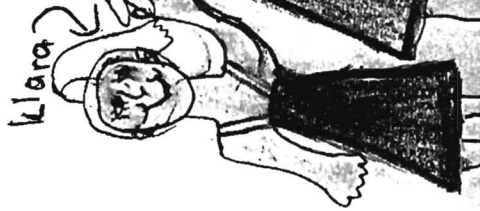
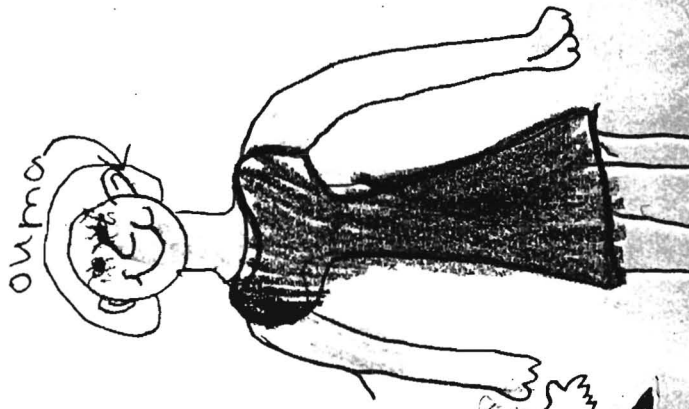
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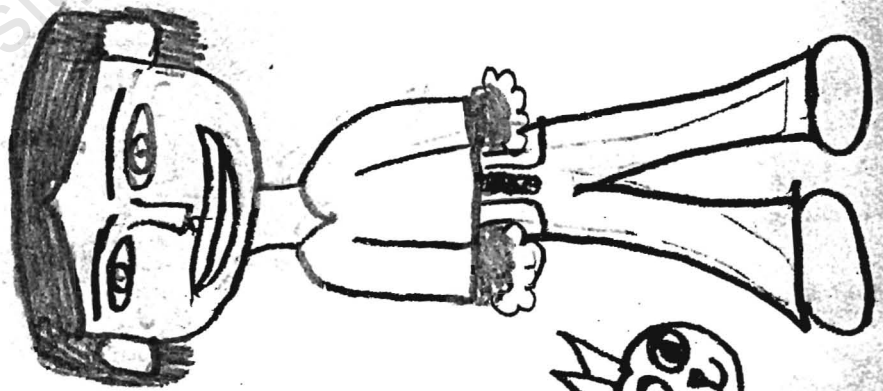
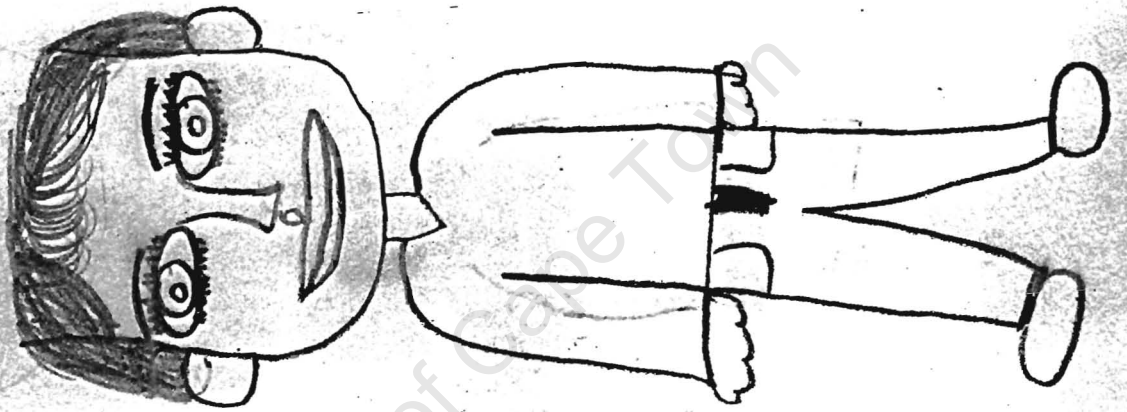
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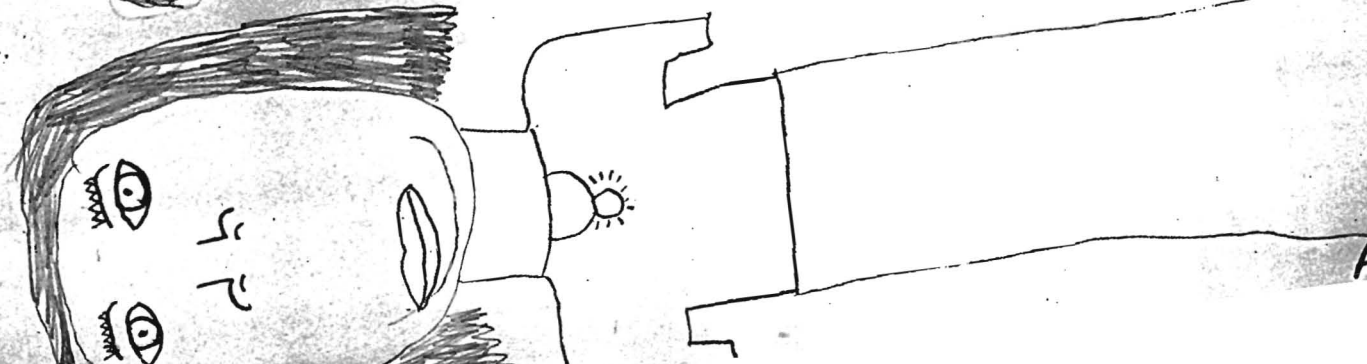
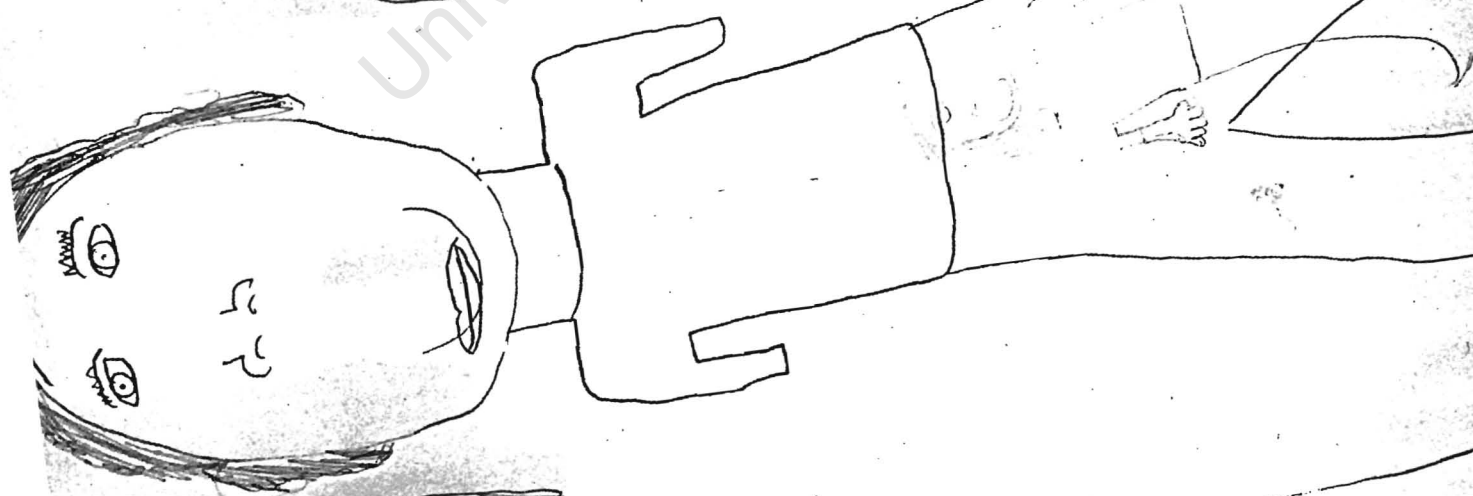
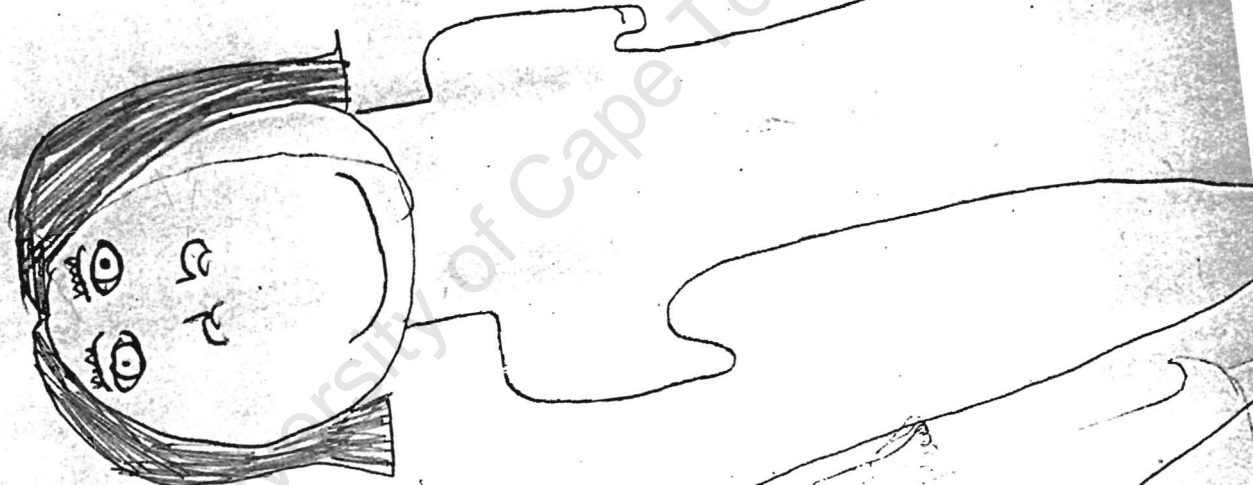
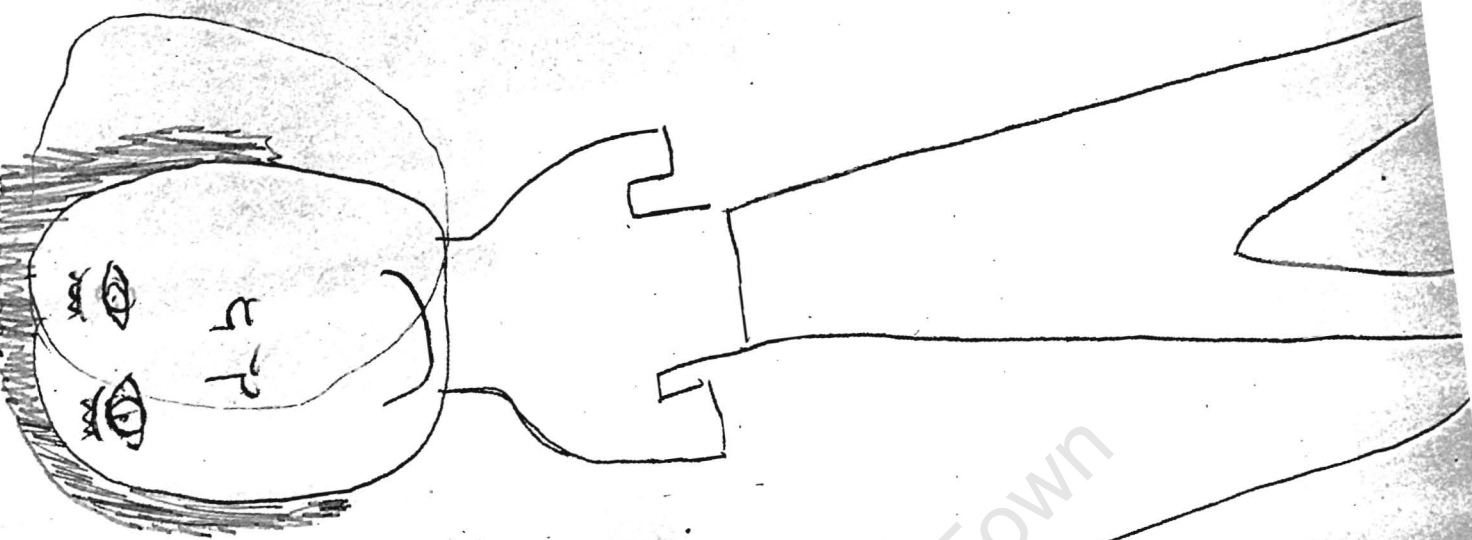
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by Amelie

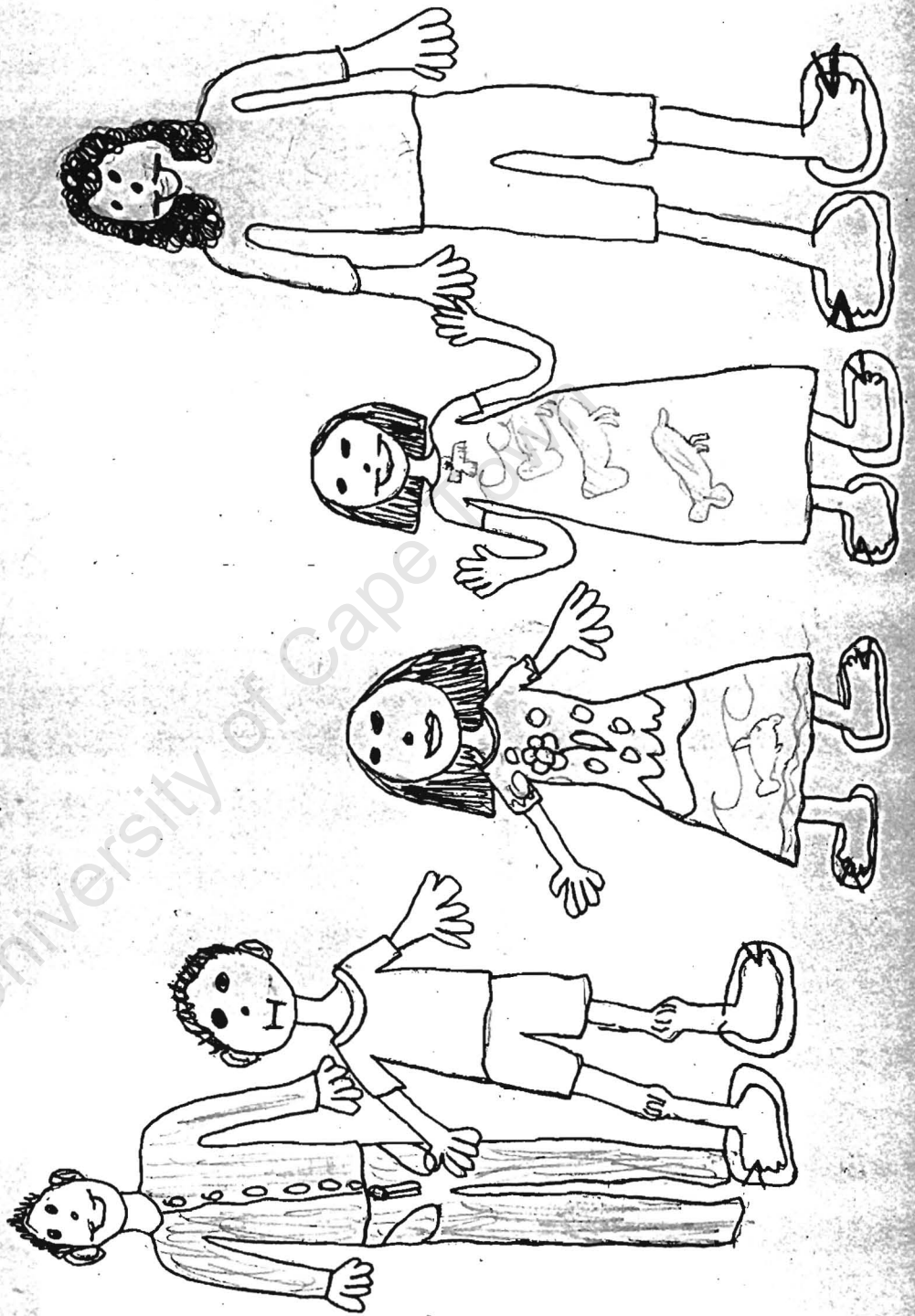


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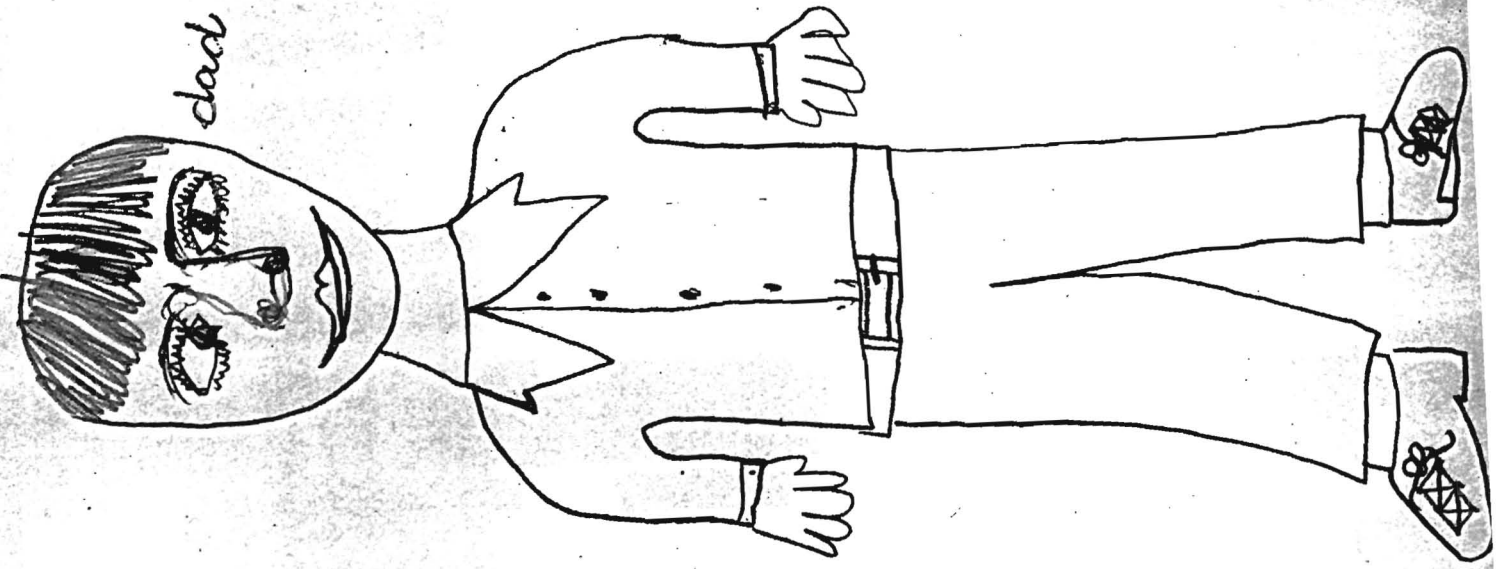




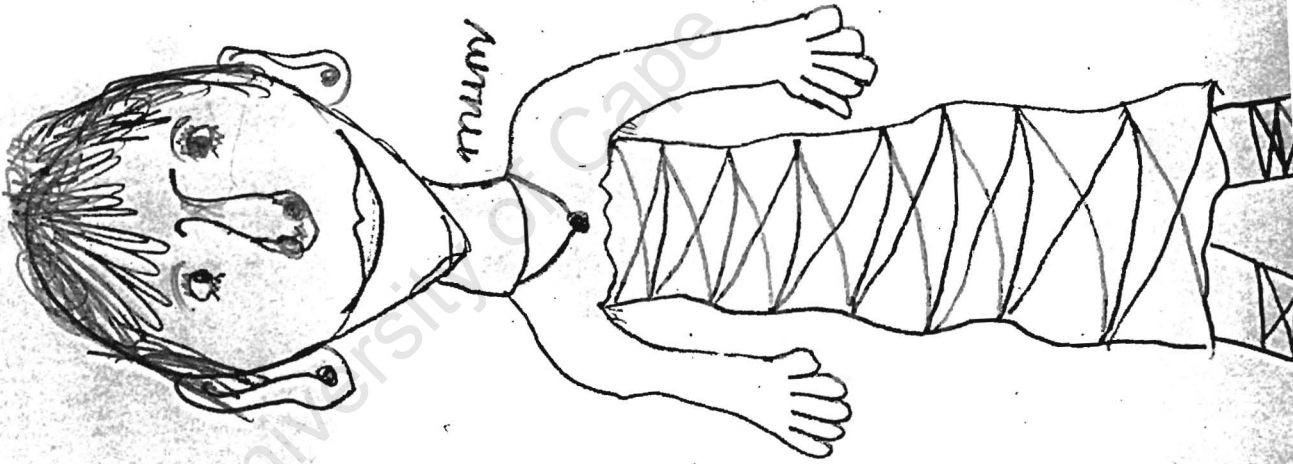
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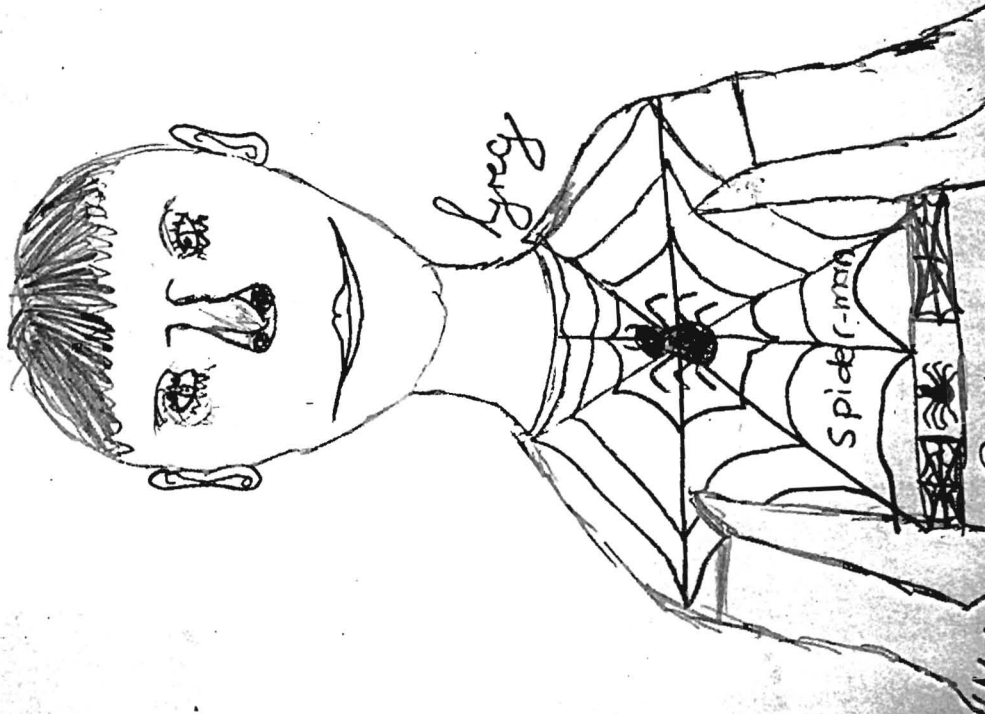
dad



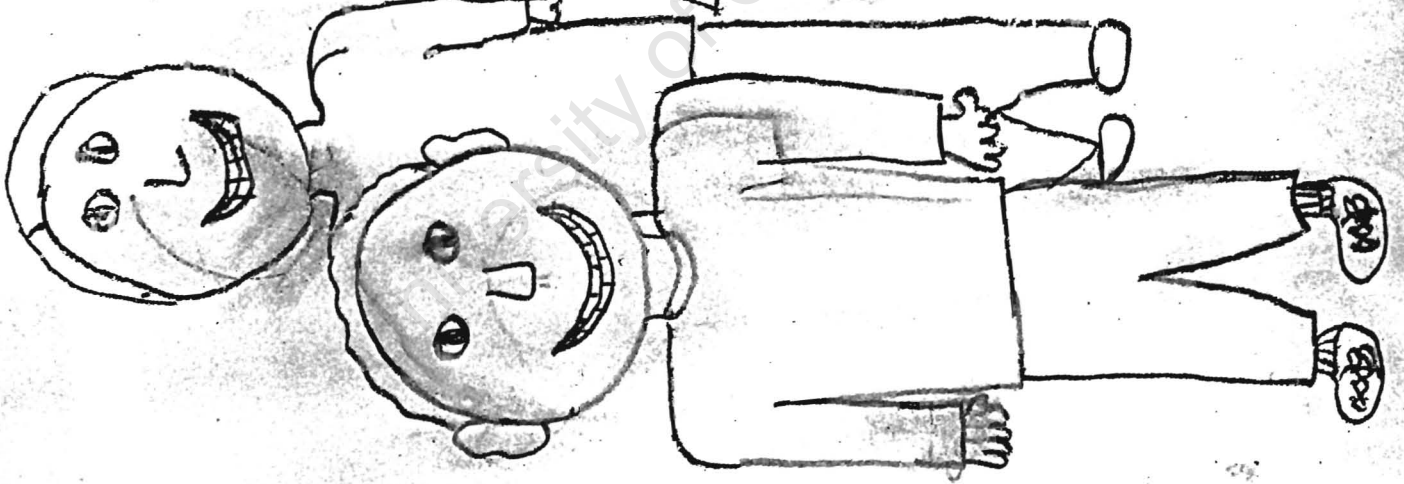
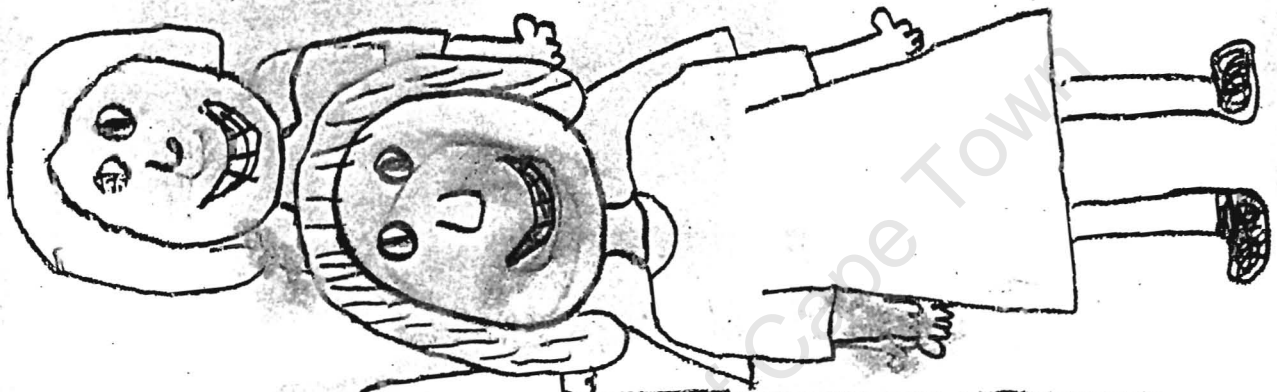
mum

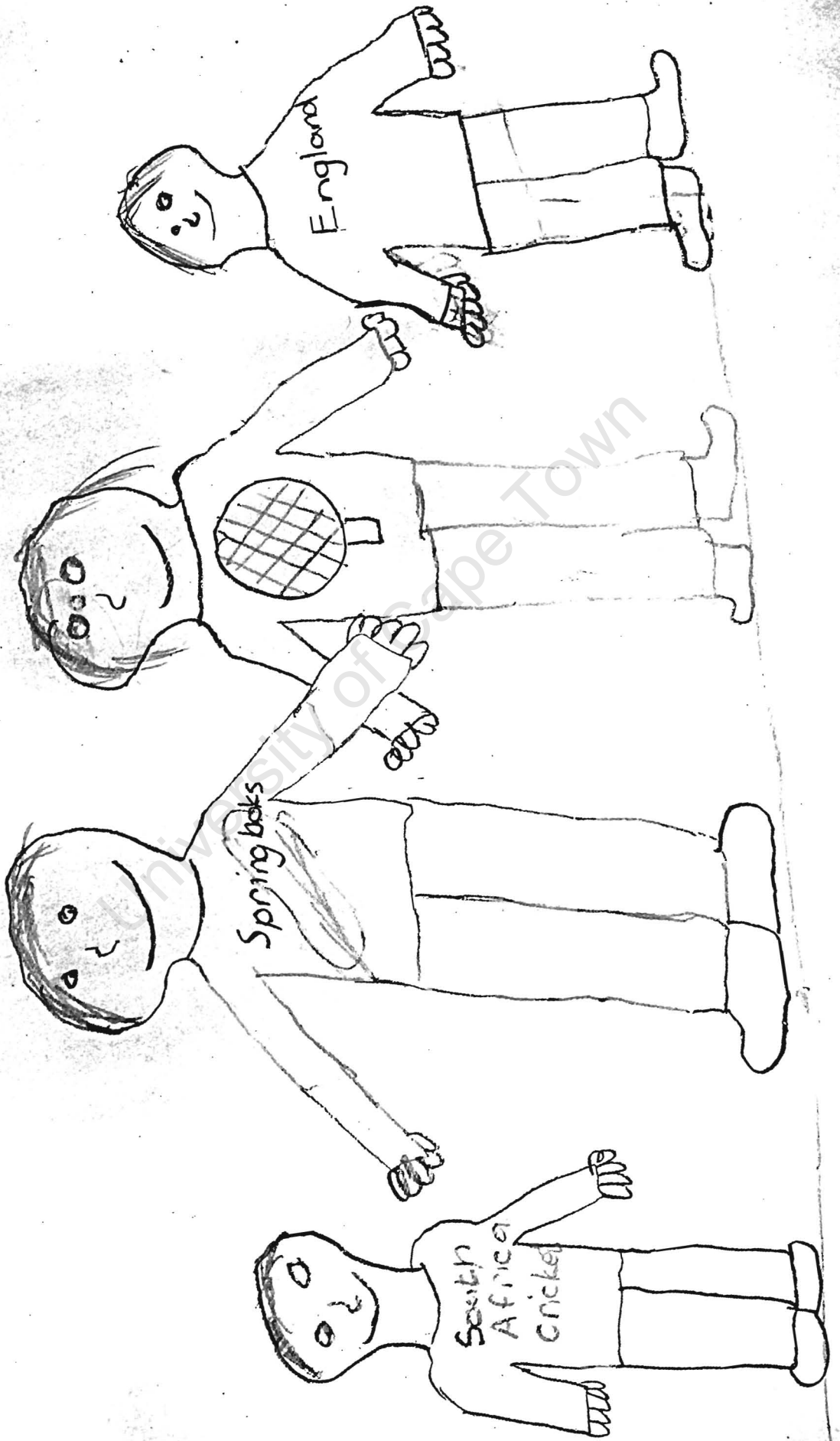


bray



Spider-man

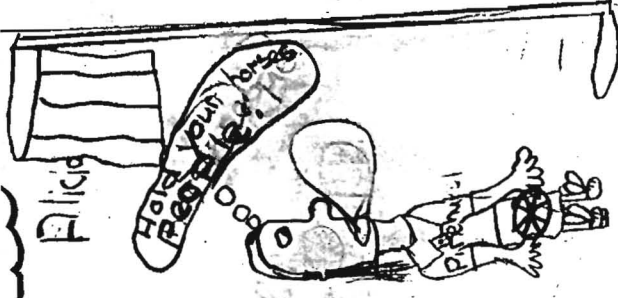




over a

STEPS SISTERS & GIRLS

Wade (brother)

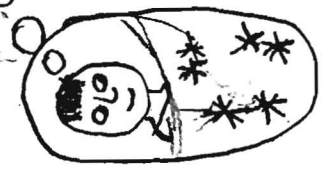


Alicia

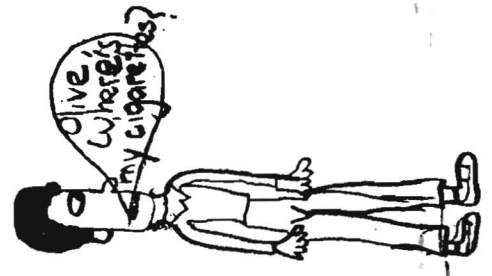
Hate your horse
Really?

Chae (Stepbrother)

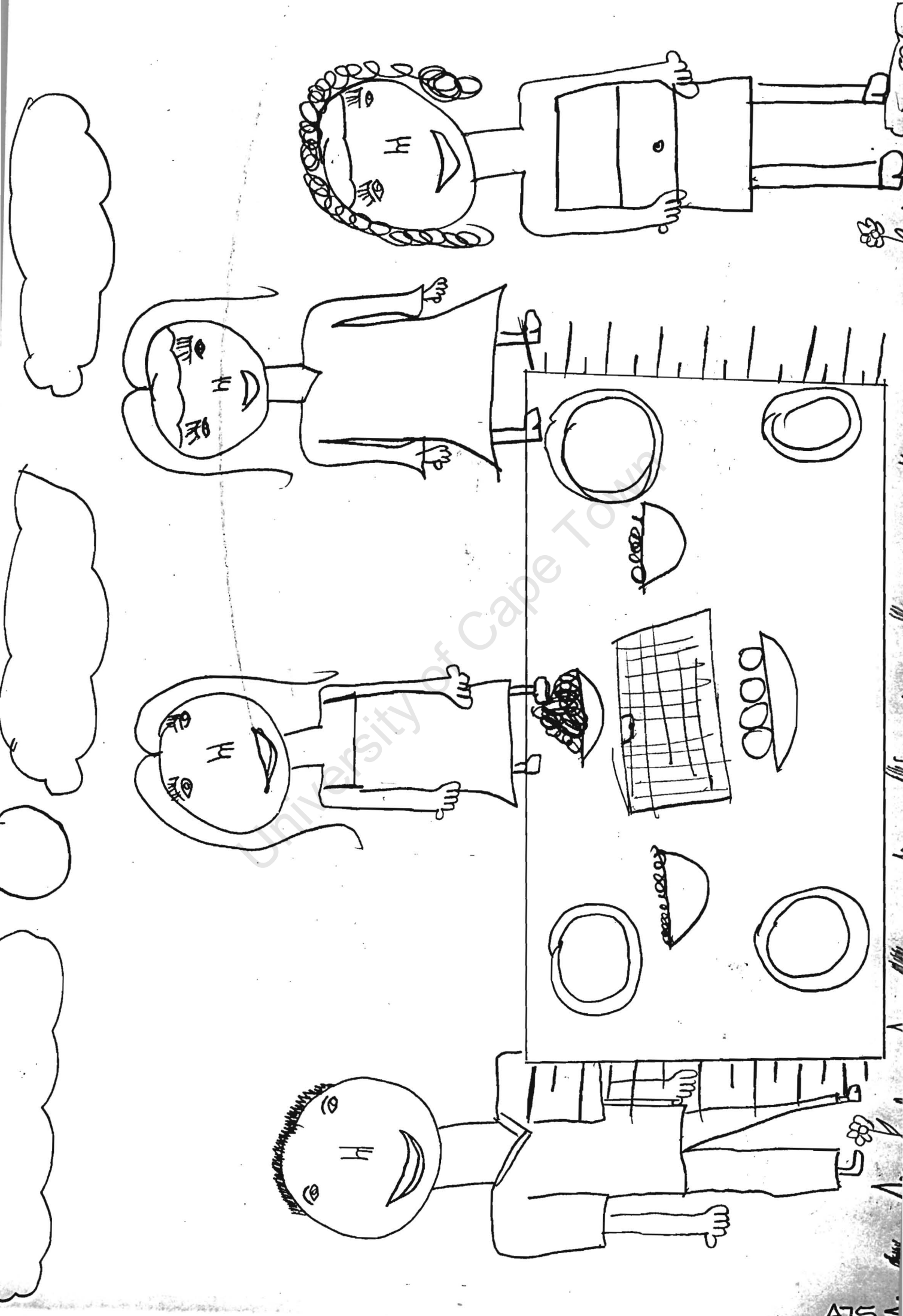
I'm so
Cute

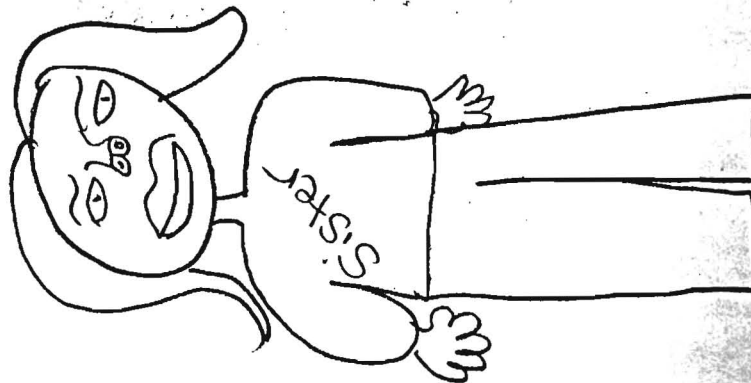
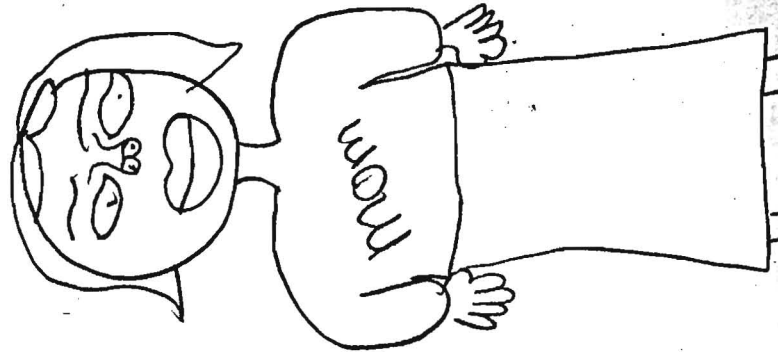
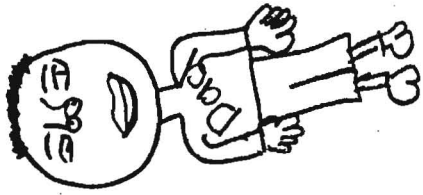


Cynthia (mom)
Francois (dad)



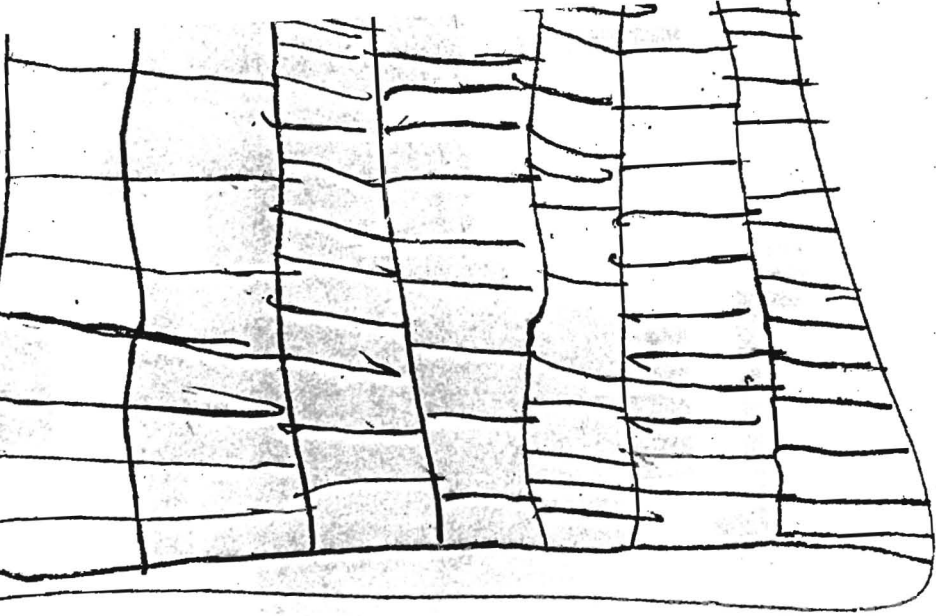
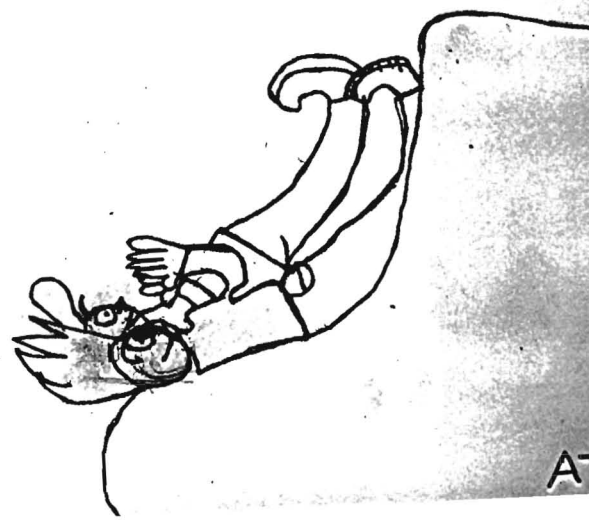
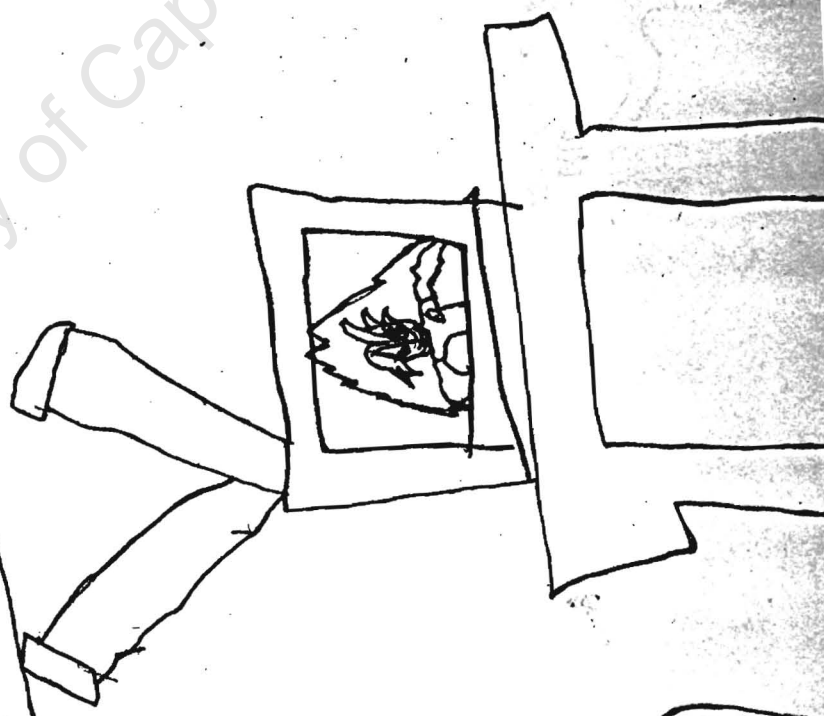
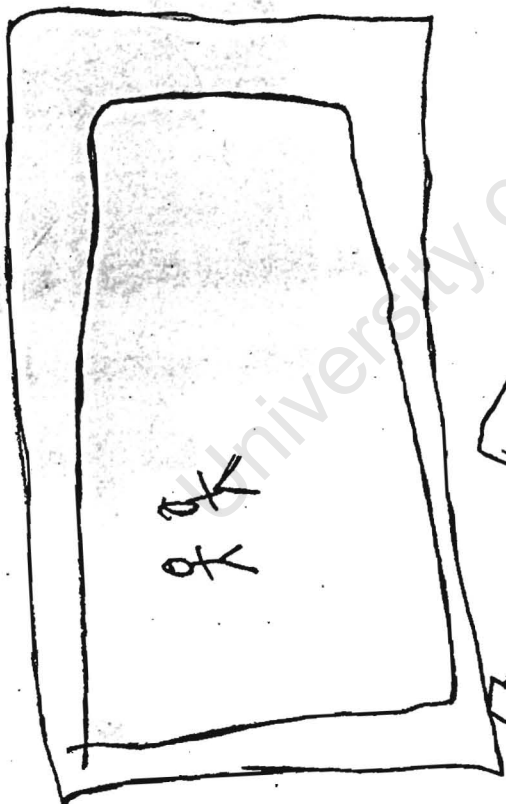
Give
Whores
My Cigarettes?



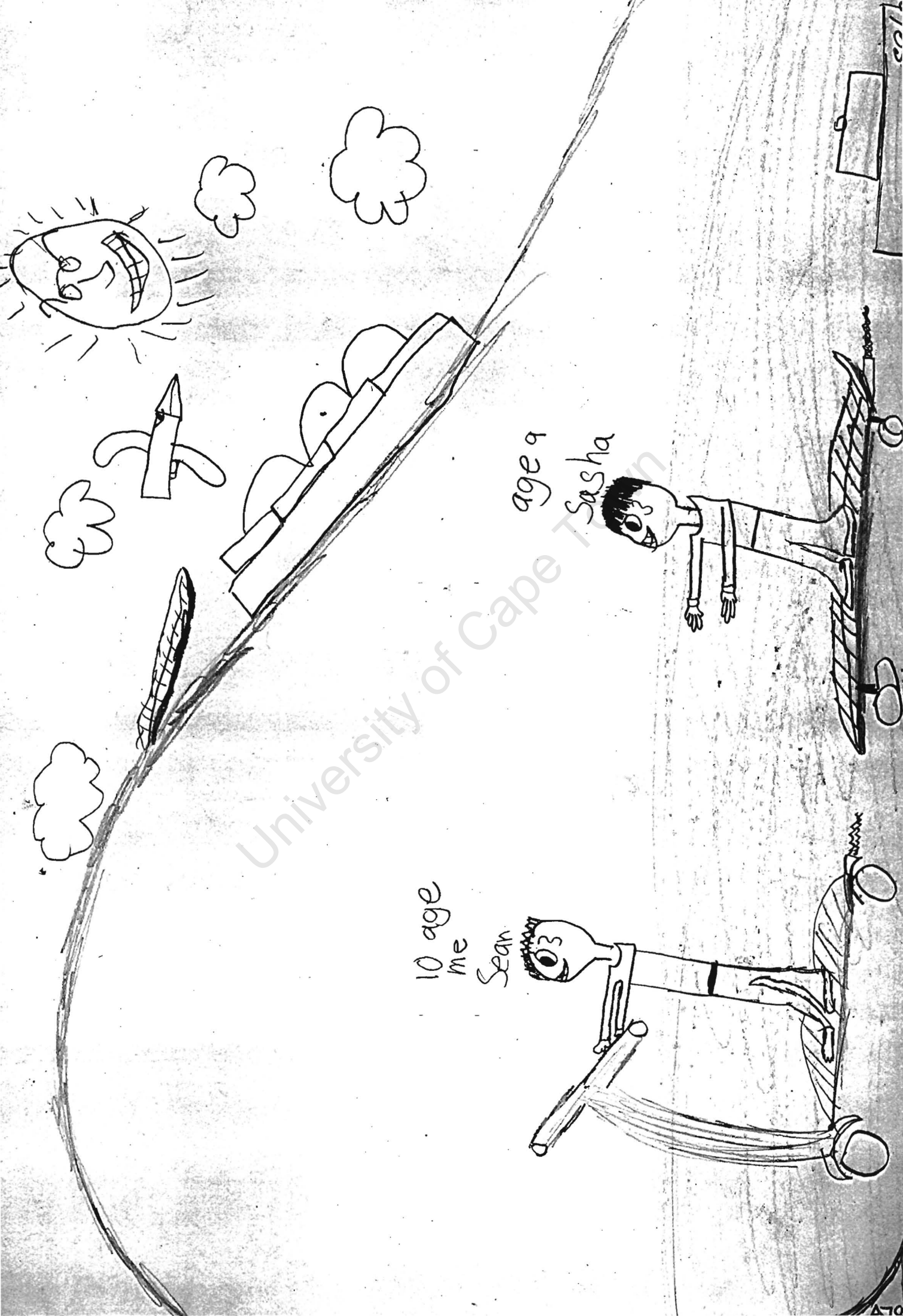


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Age: 9 NAME: Matthew.



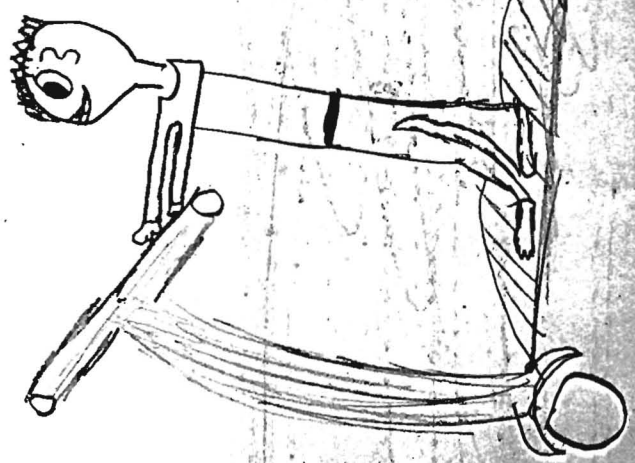
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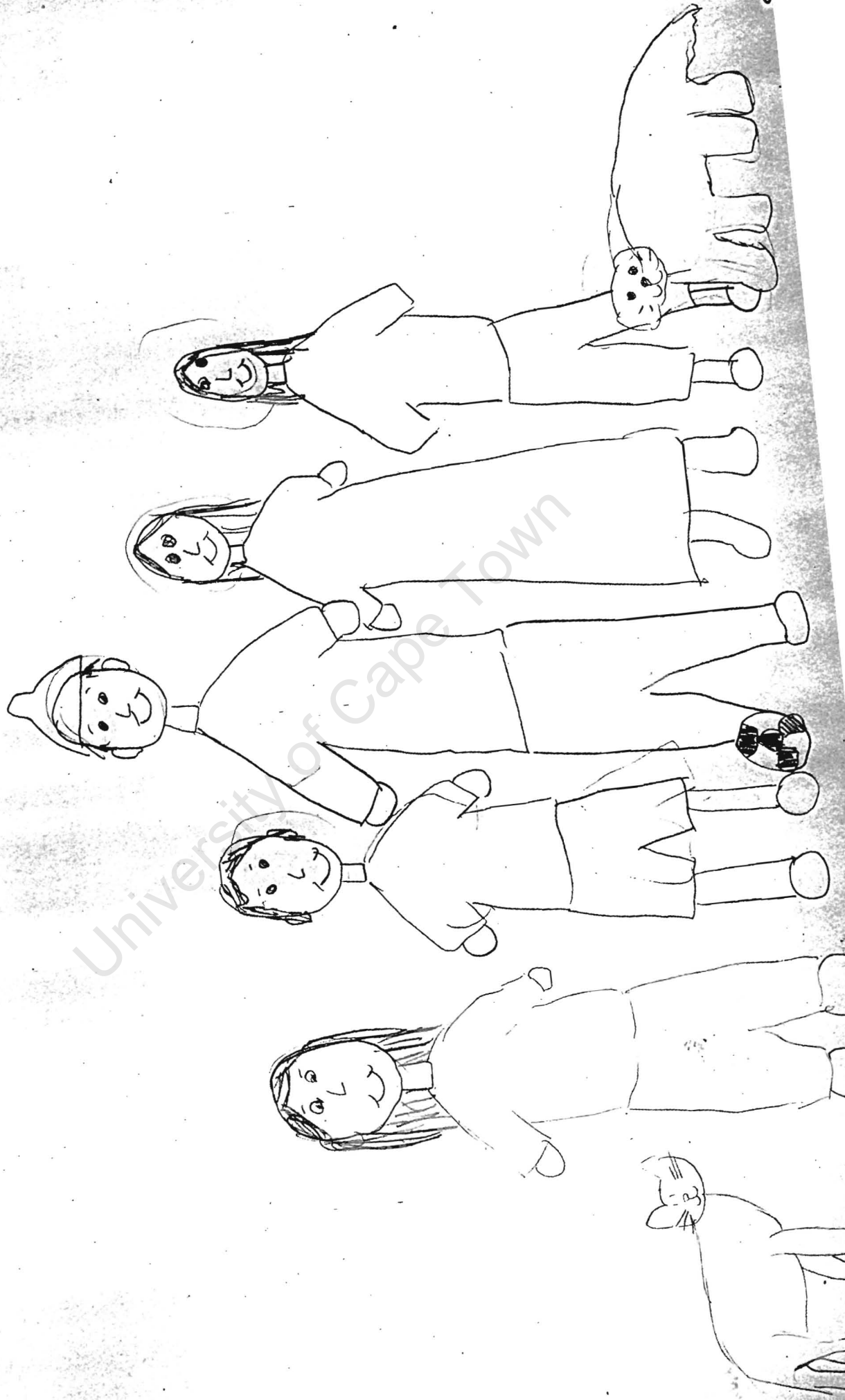
age 9
Sasha

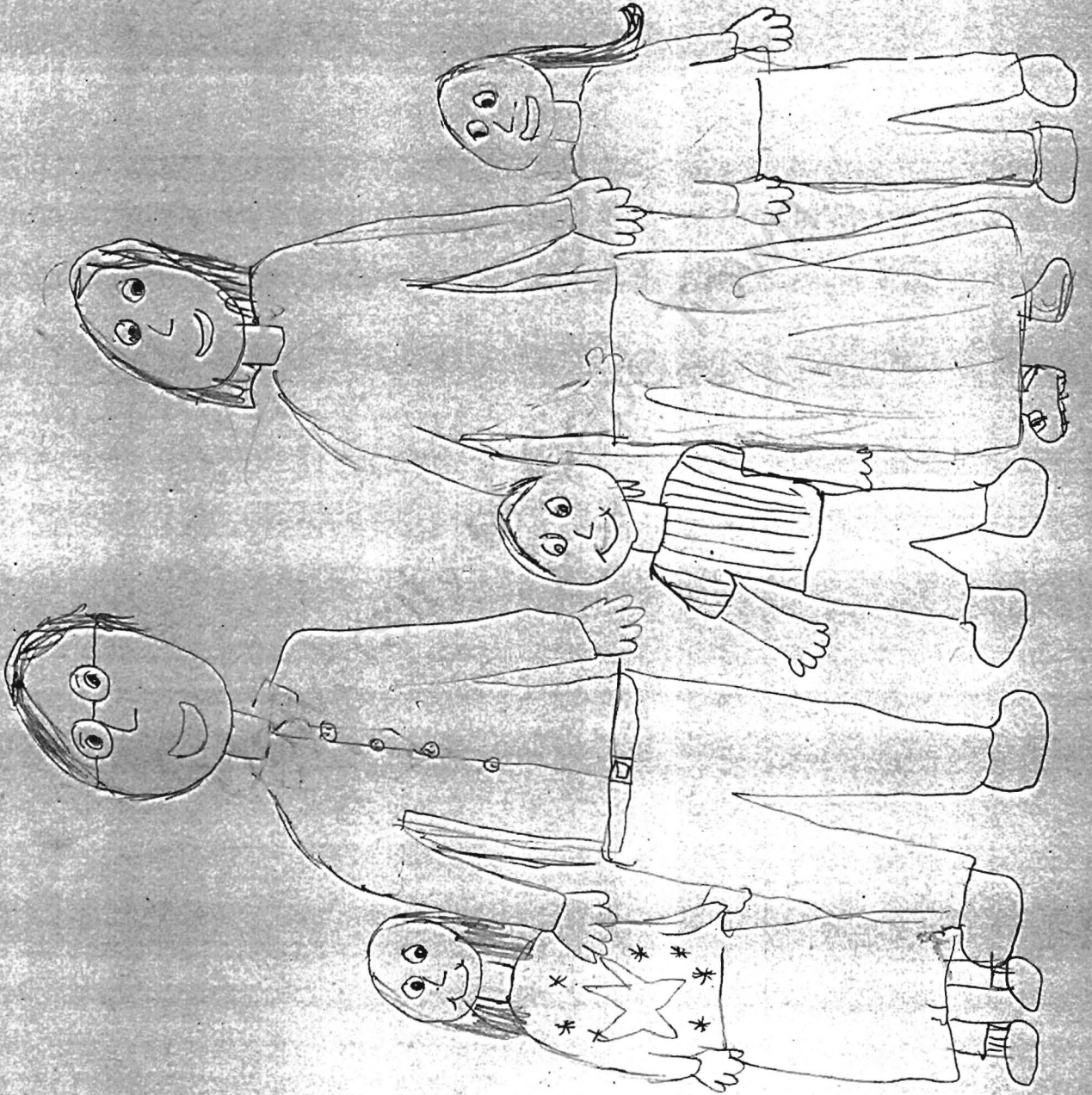


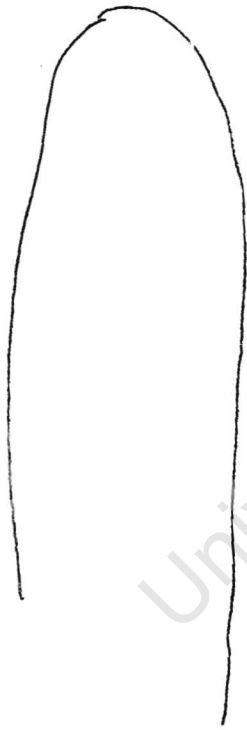
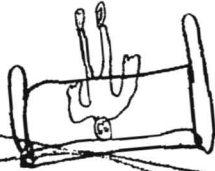
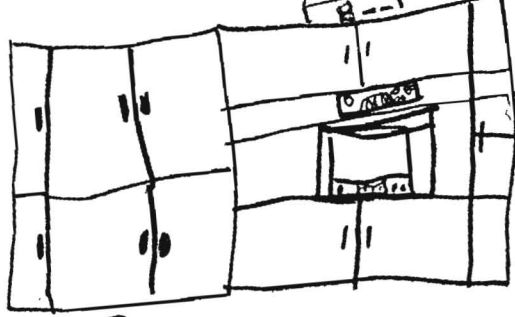
10 age
me
Sean

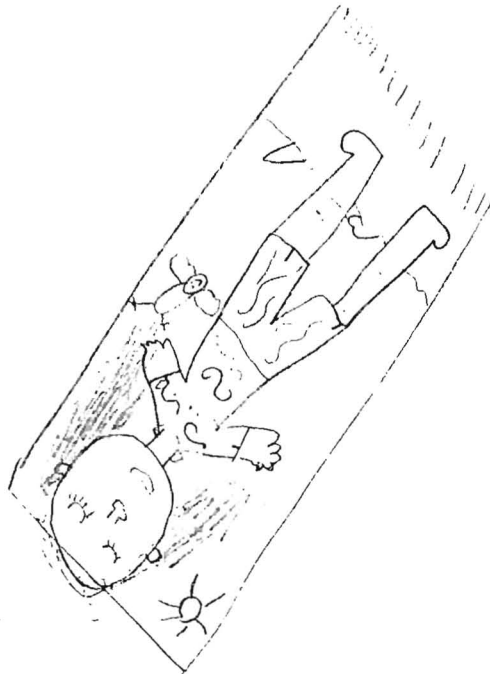
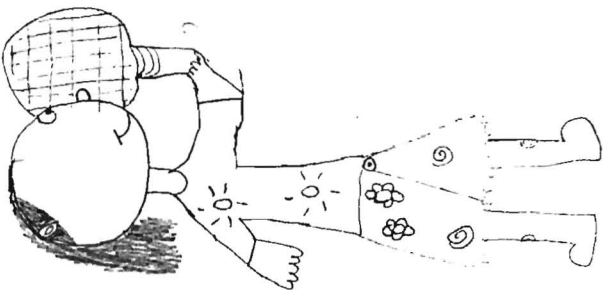
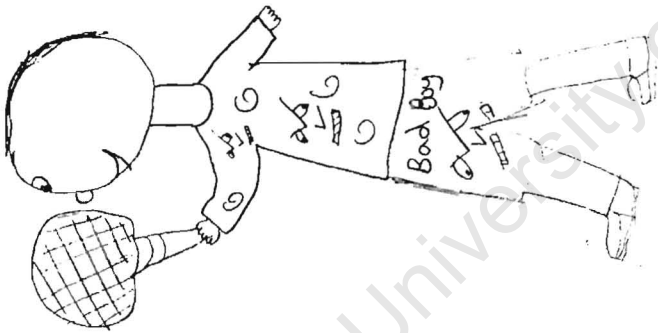
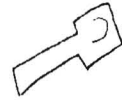
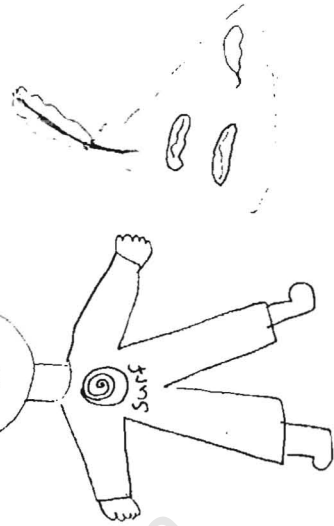
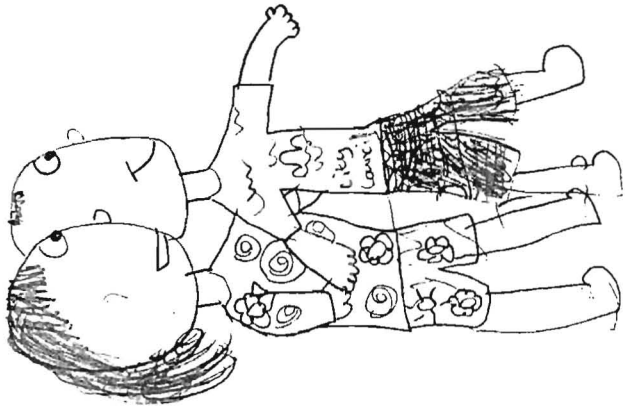


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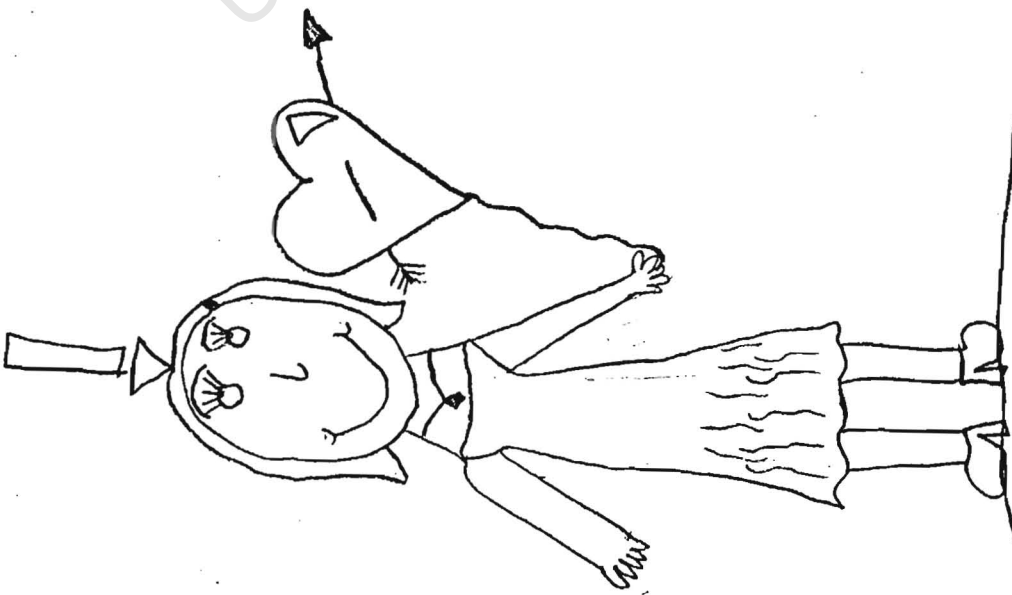




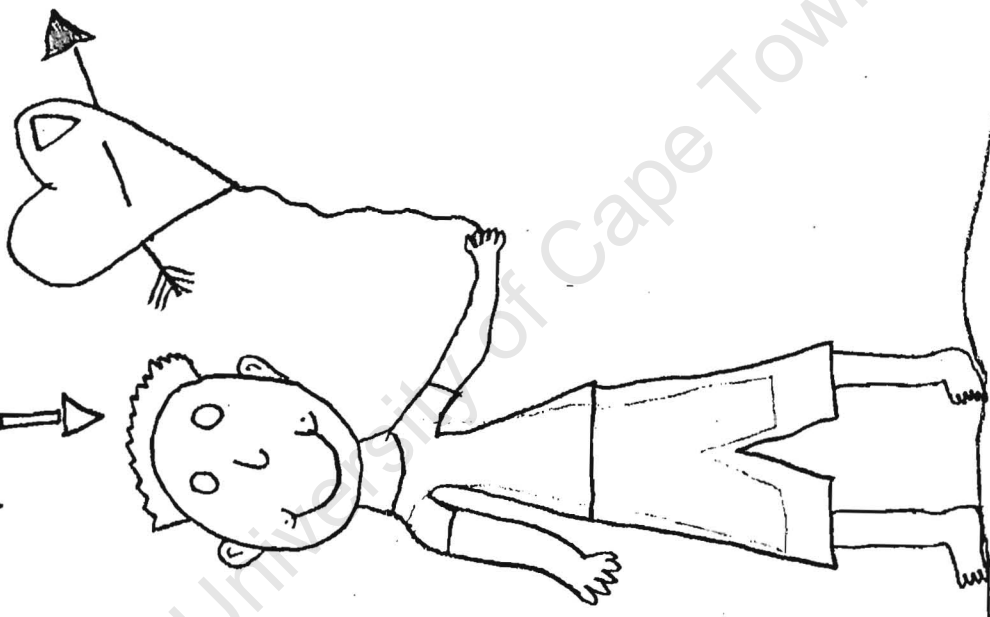




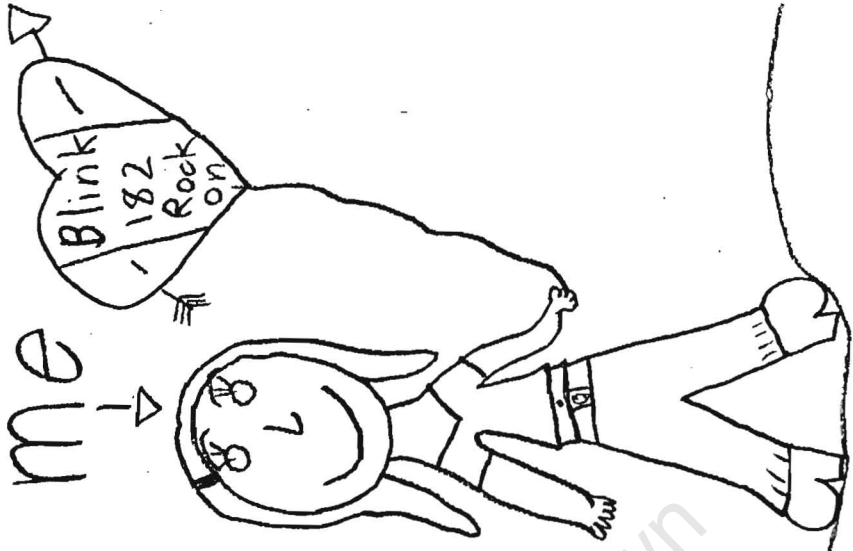
mom

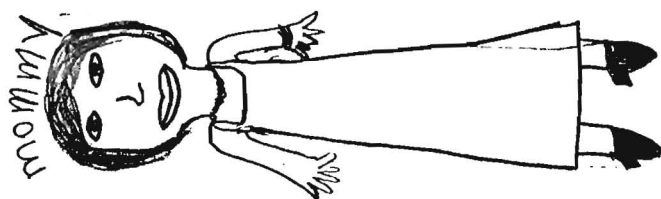


Dad

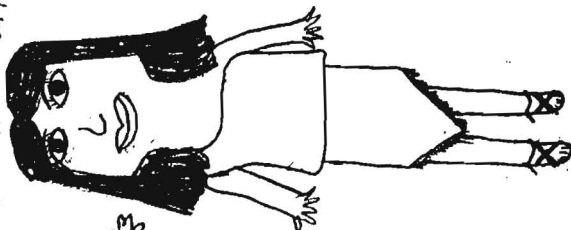


me





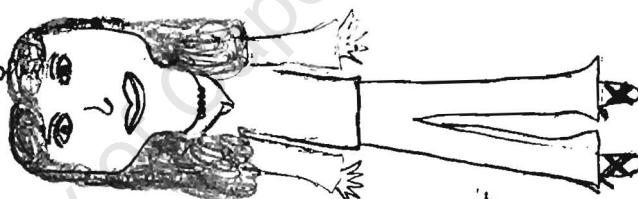
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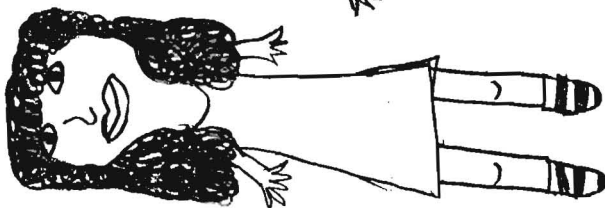
daddy



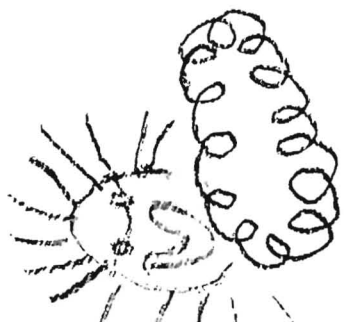
Judy



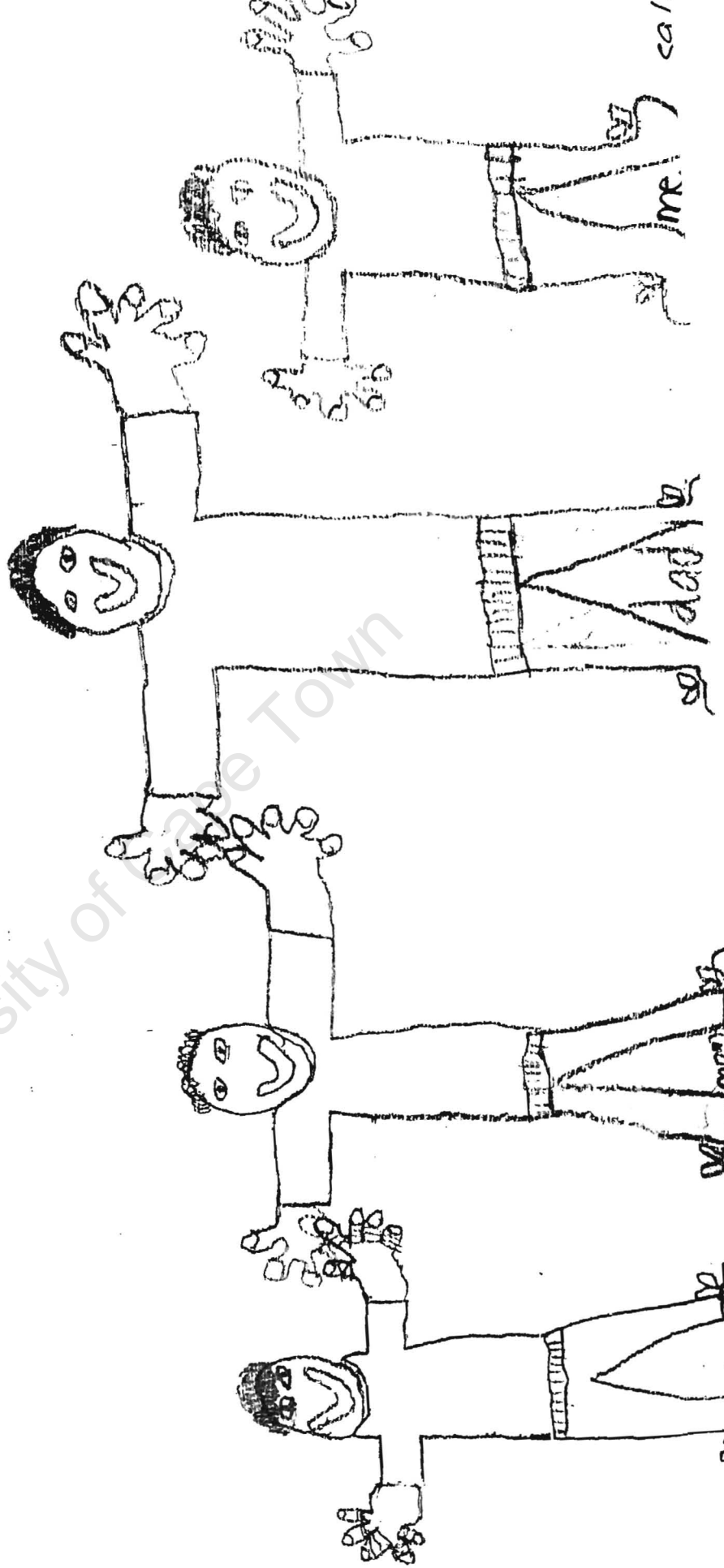
Kirsten



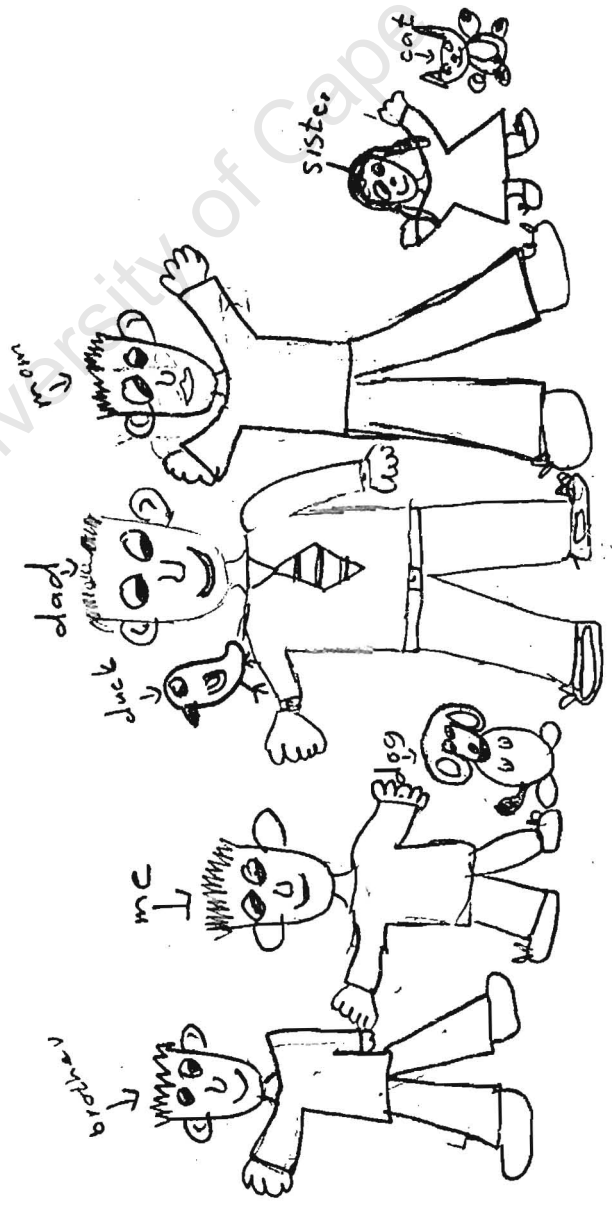
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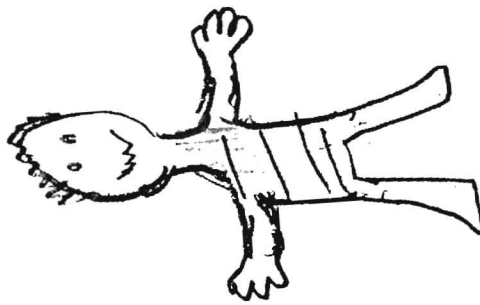
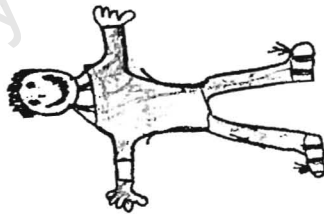
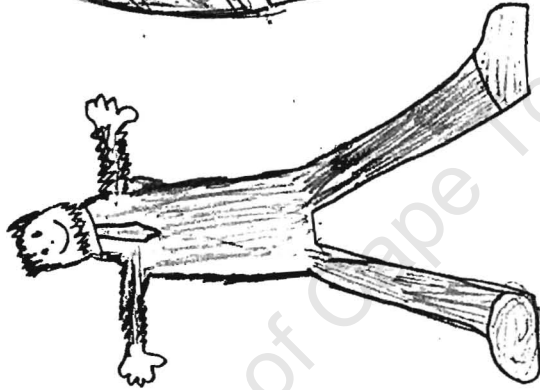
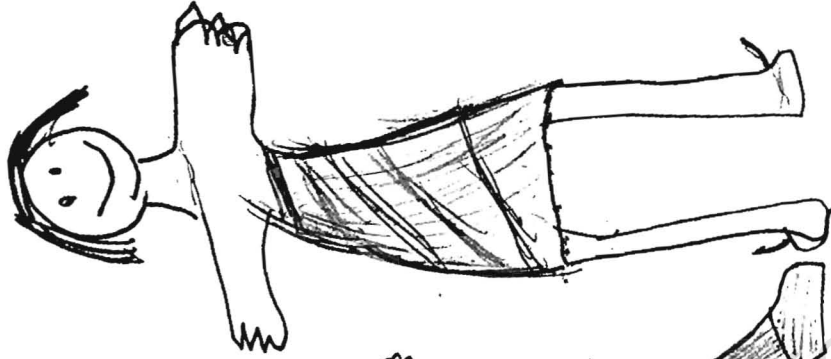
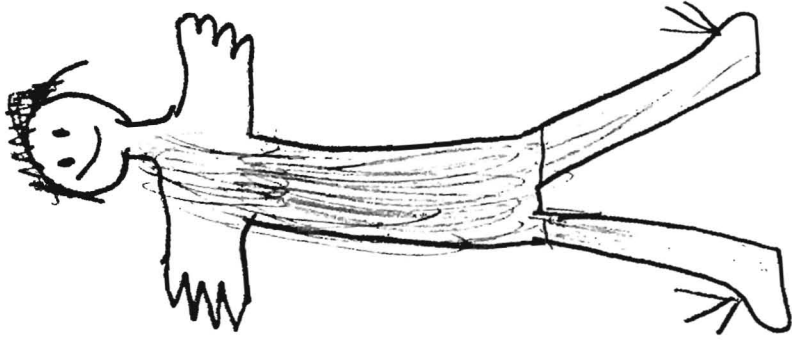
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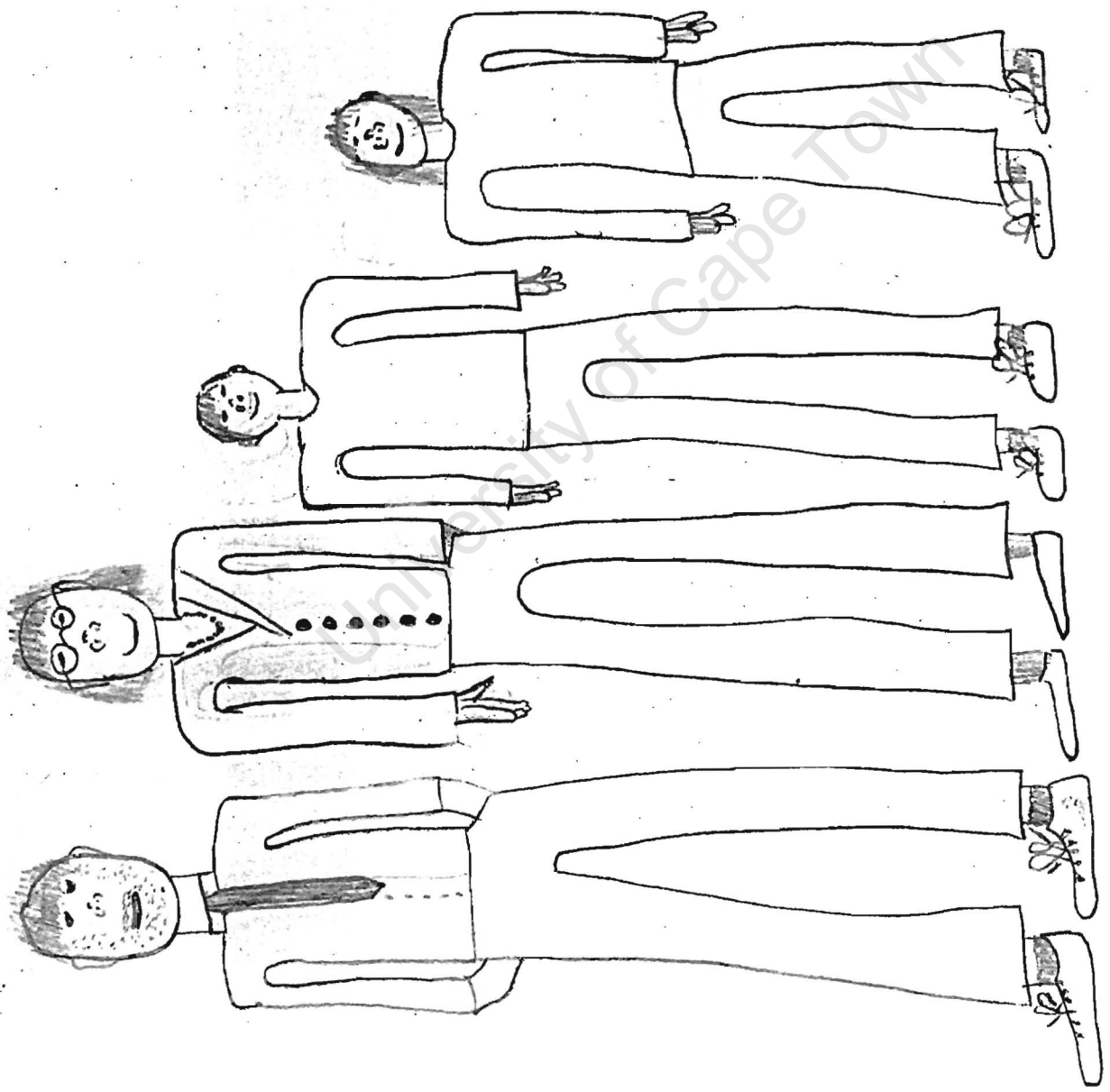
age 9



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THE TEN-YEAR-OLD DRAWINGS

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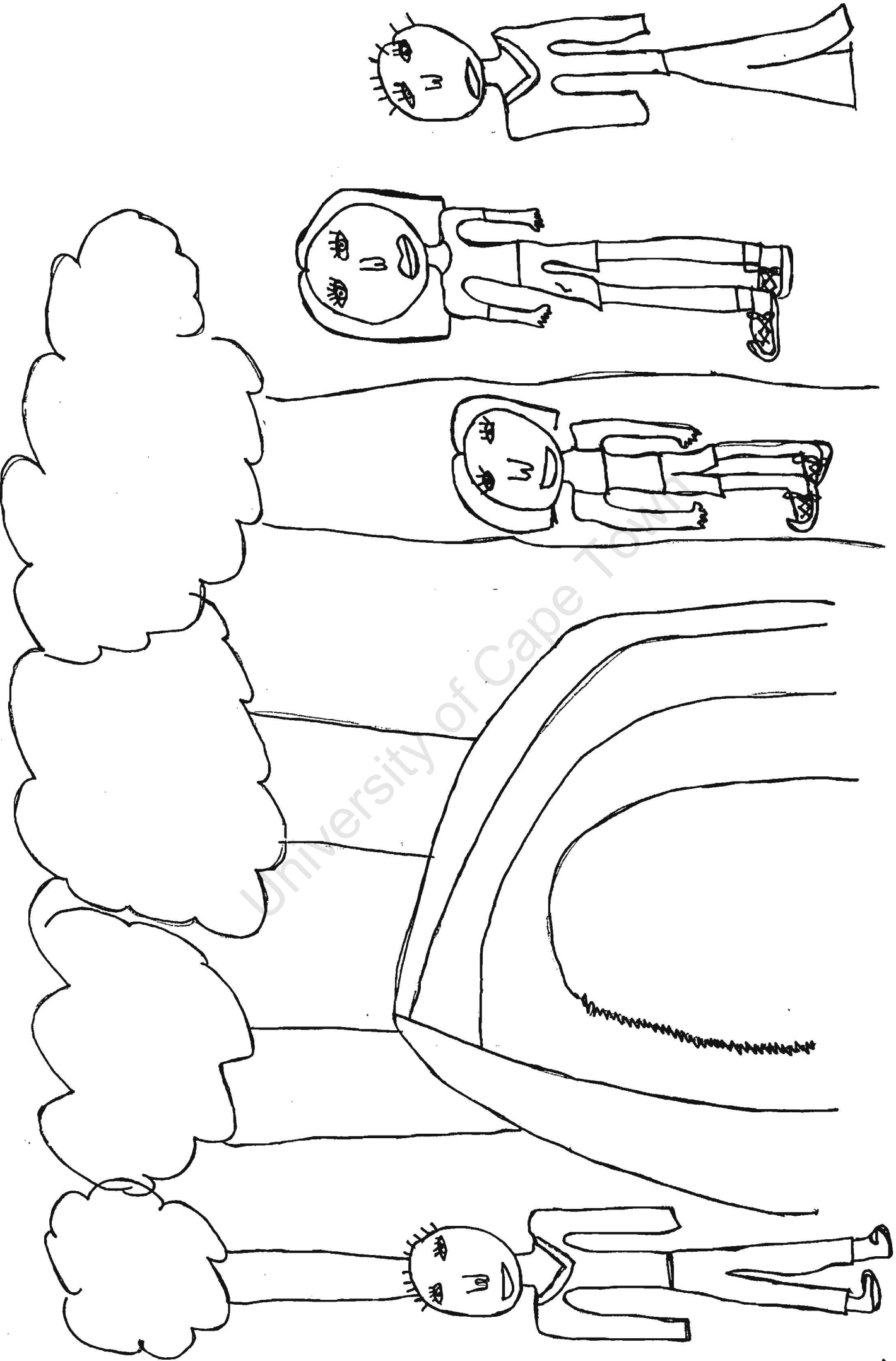


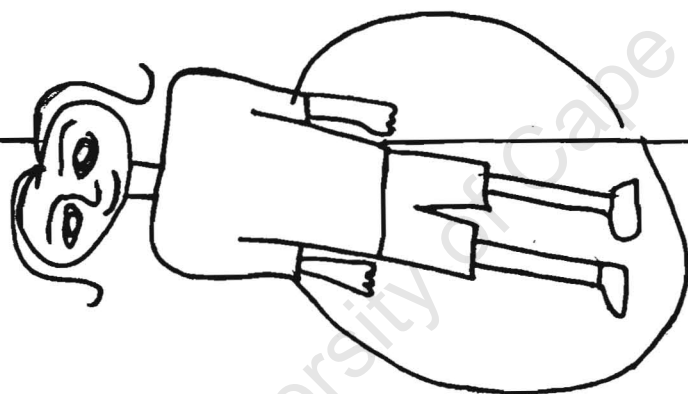
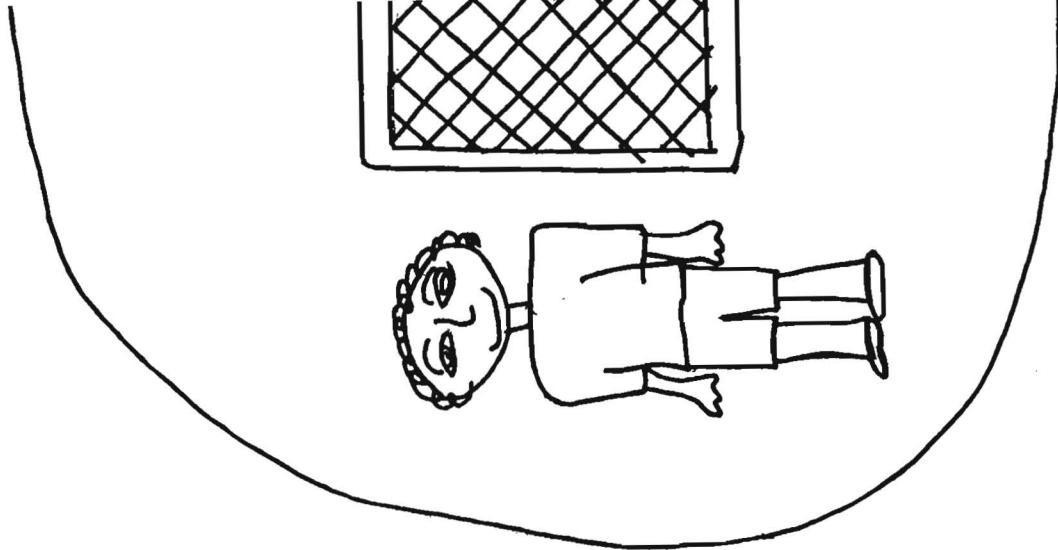
Sister

me

Dad

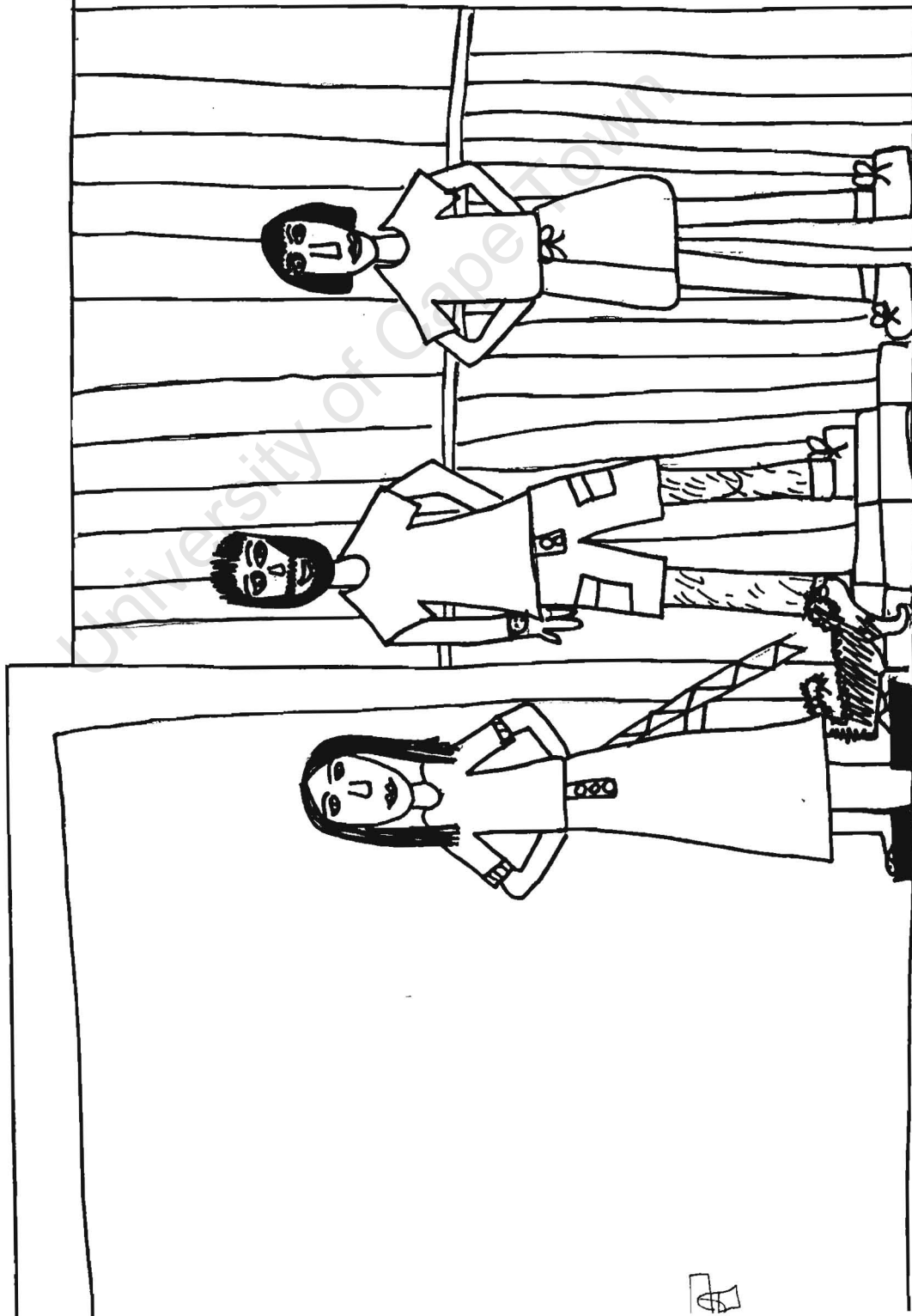
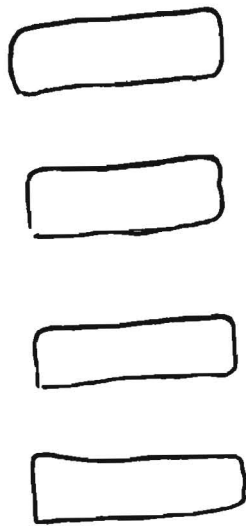
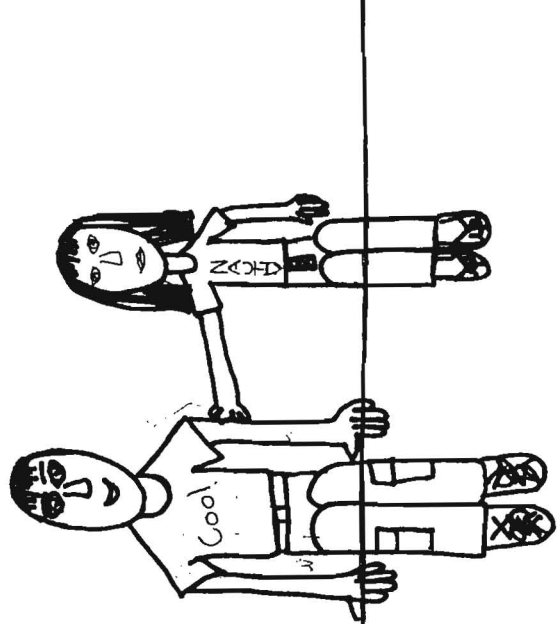
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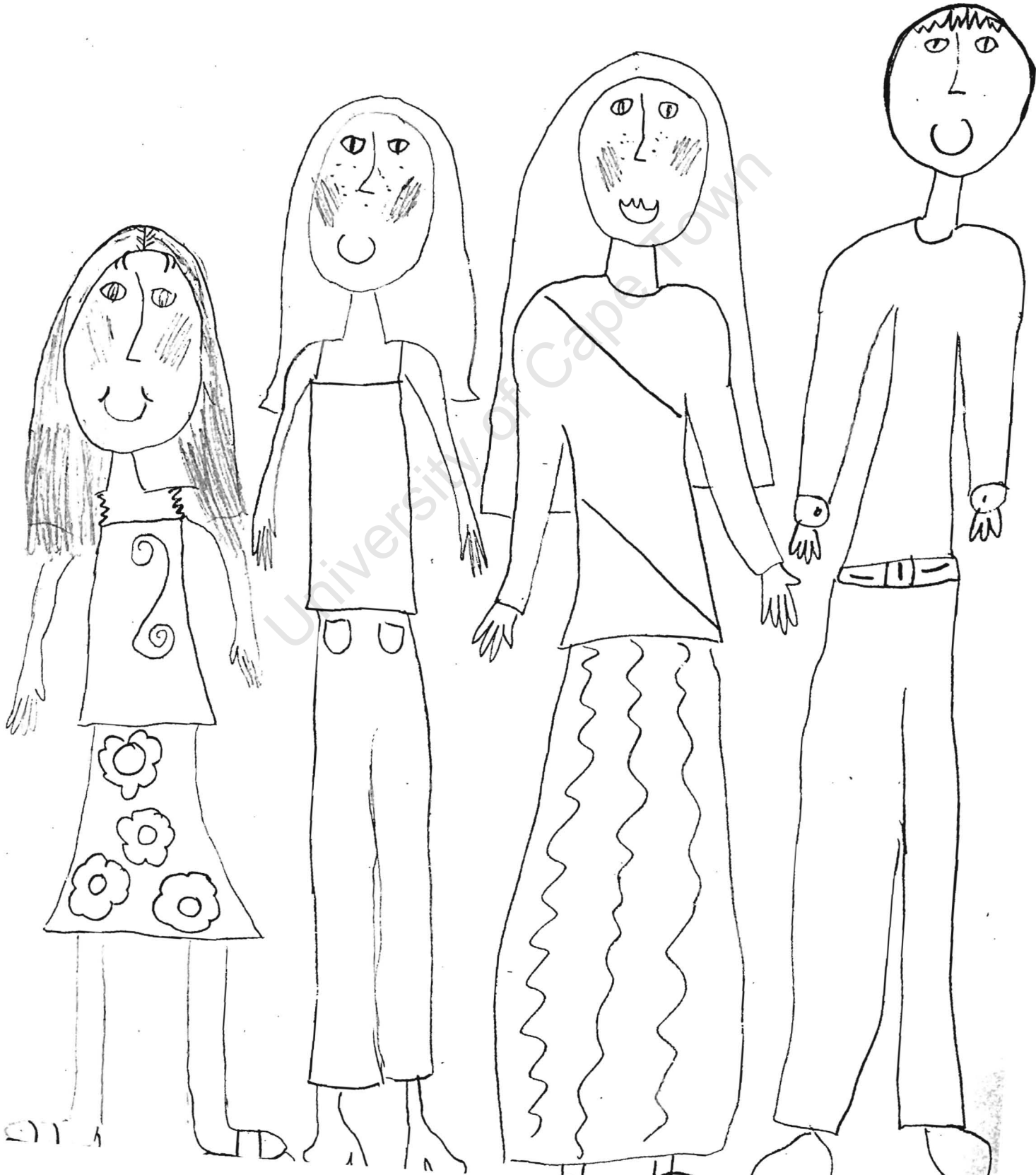


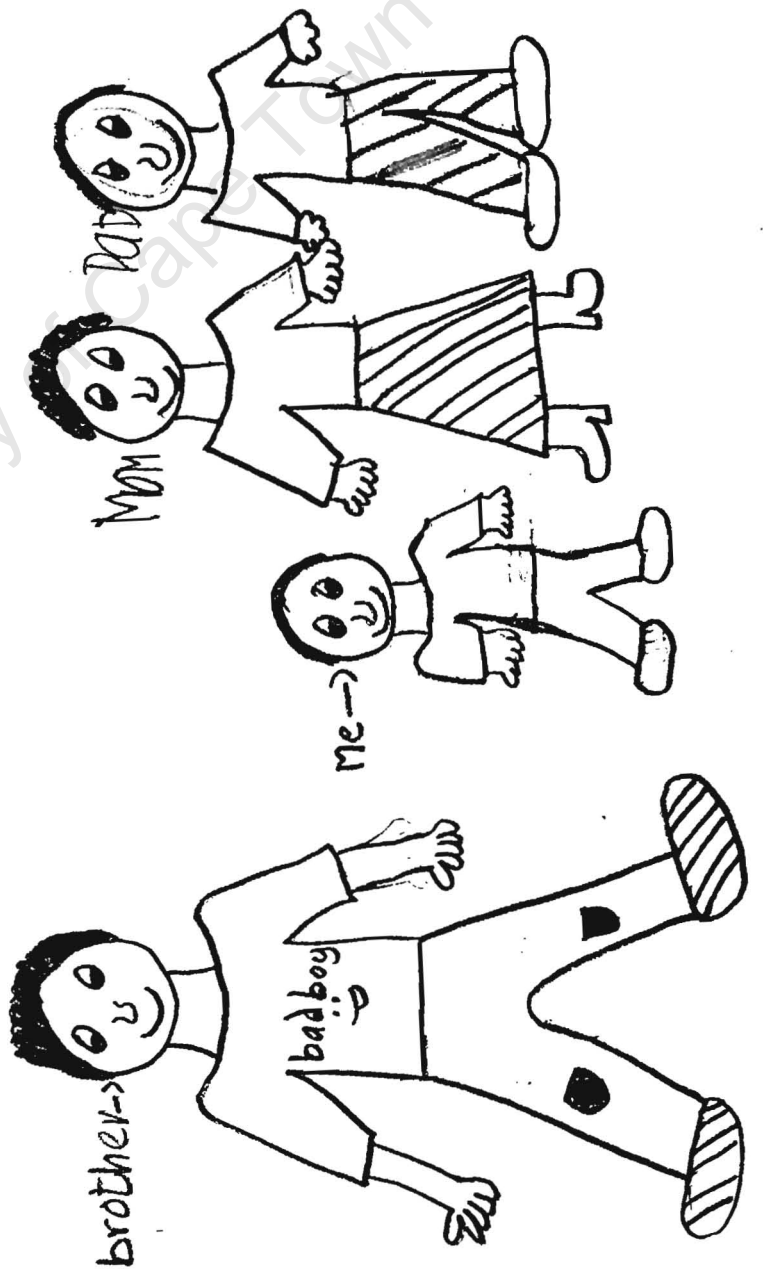


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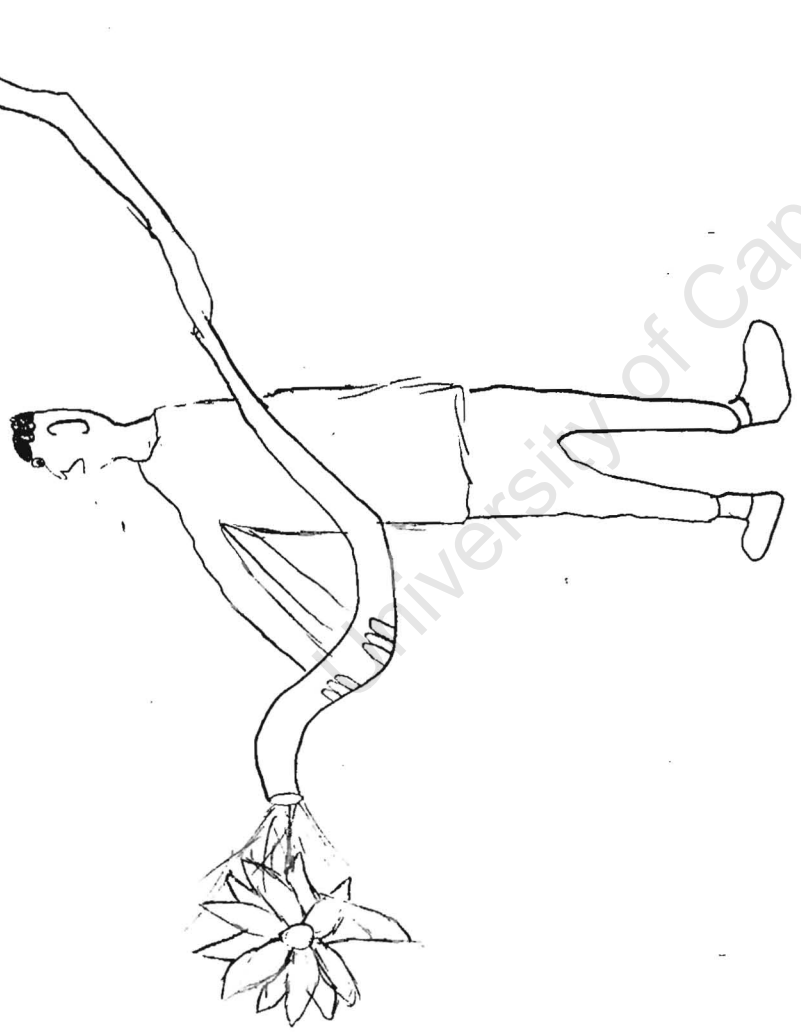
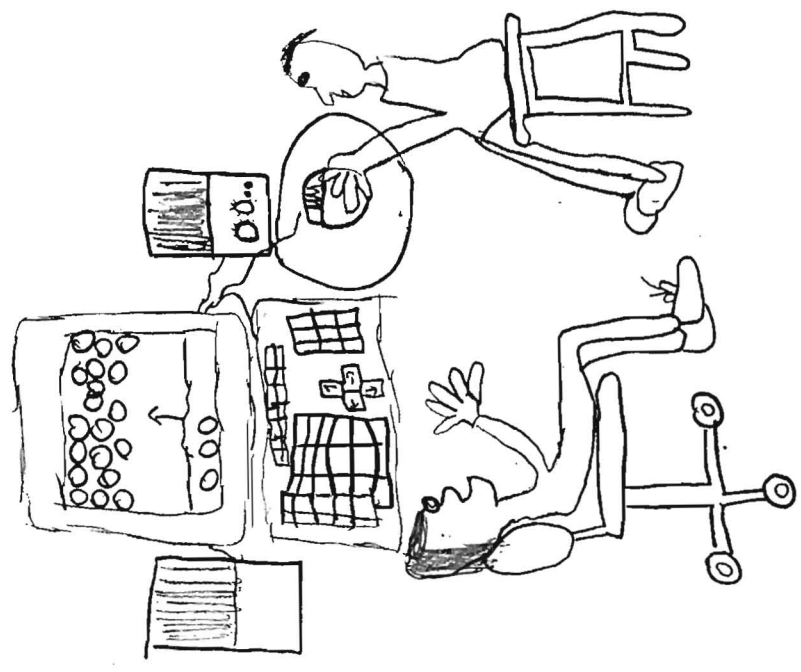
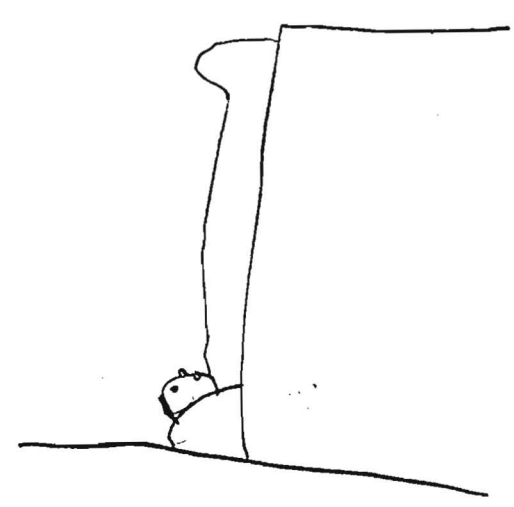
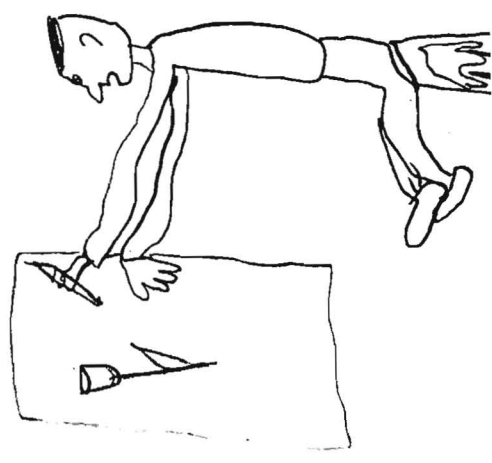
AGE 10. MY FAMILY





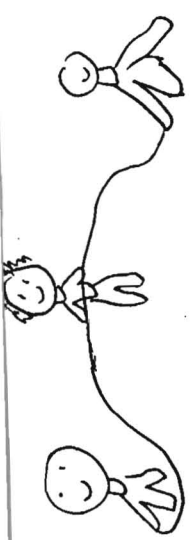
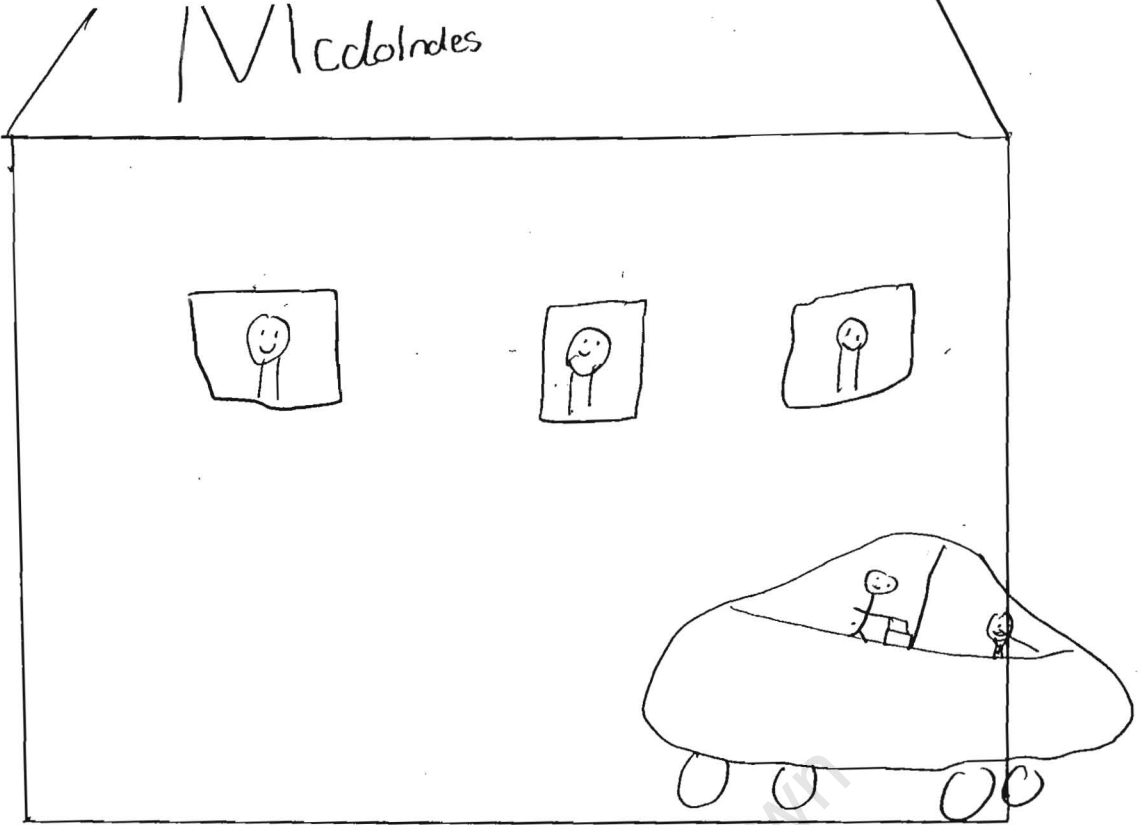


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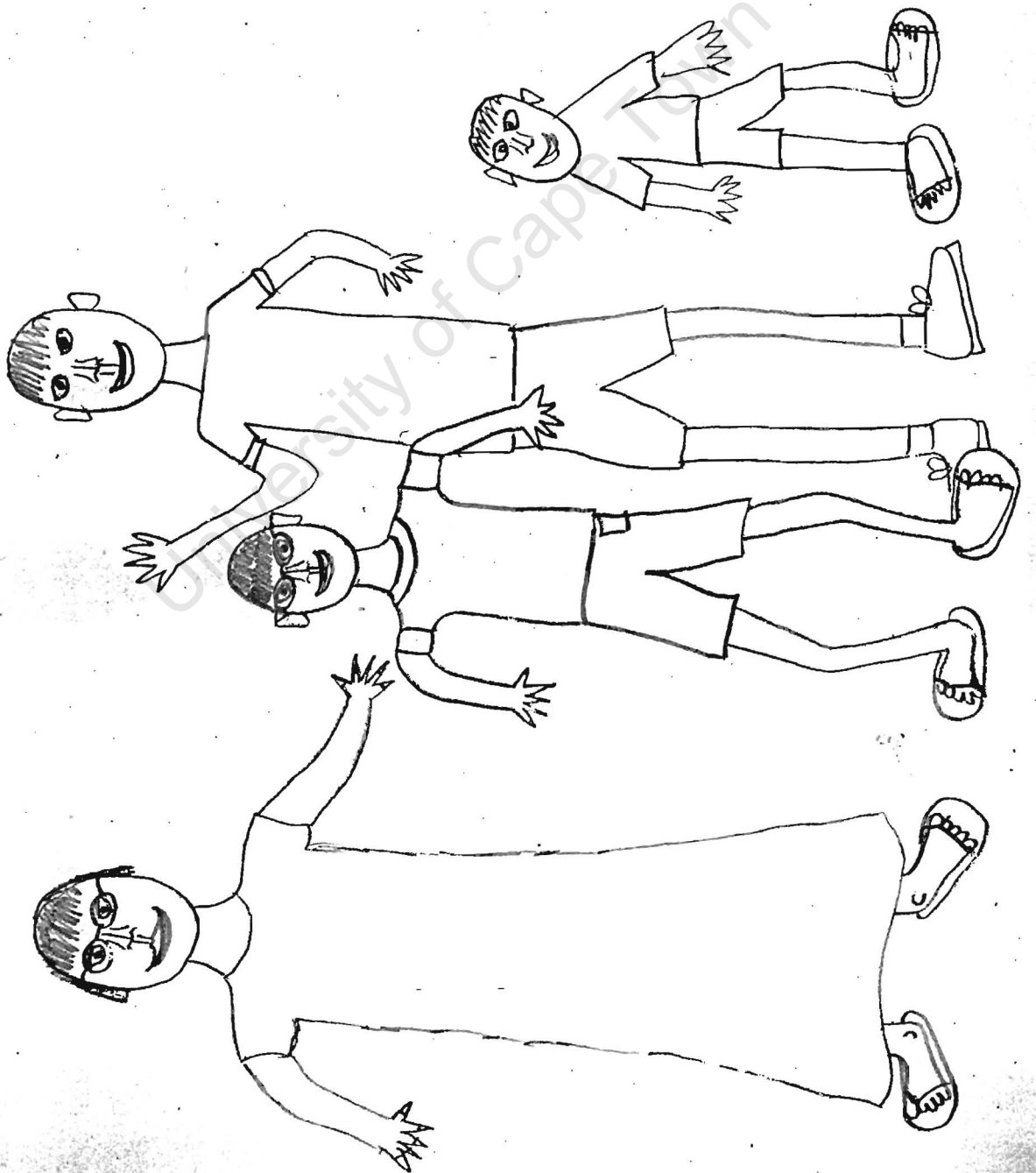


McColndes

D10-2

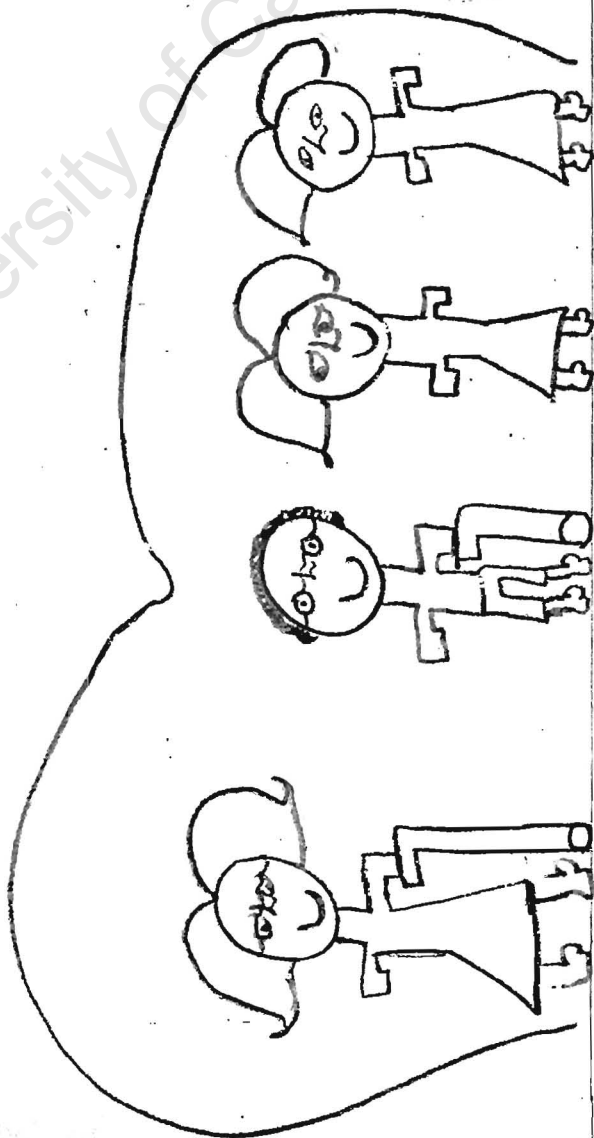


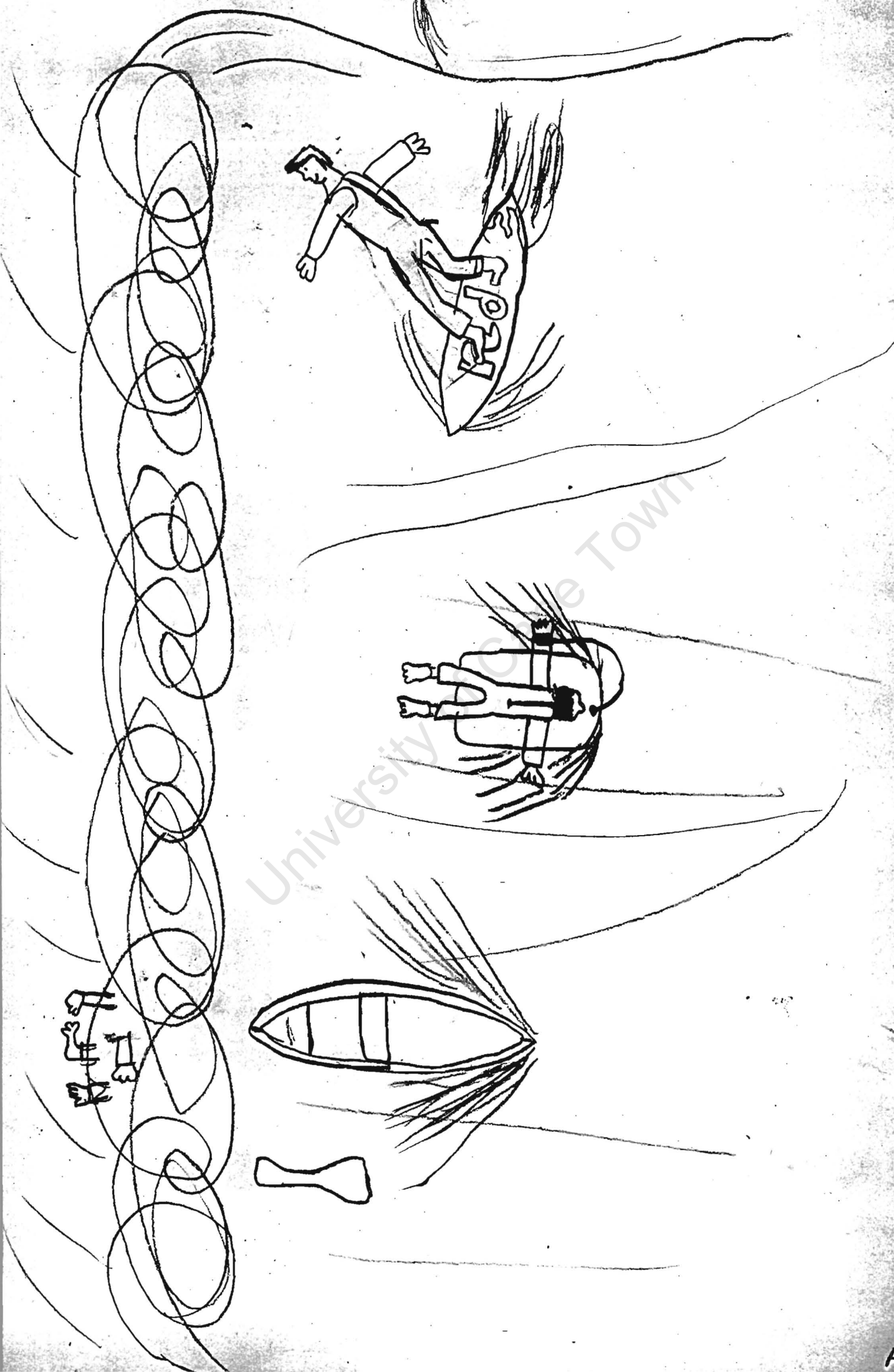
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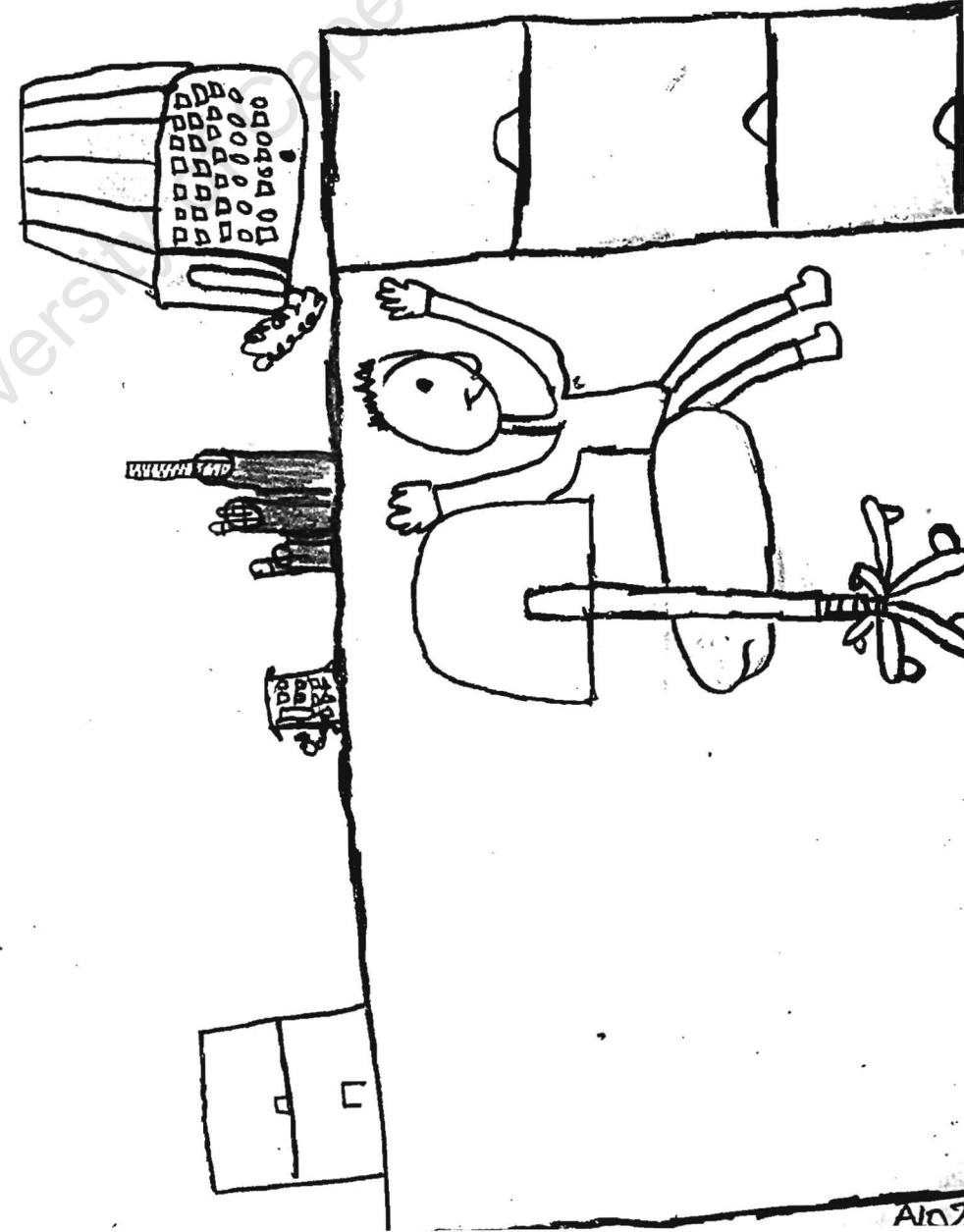
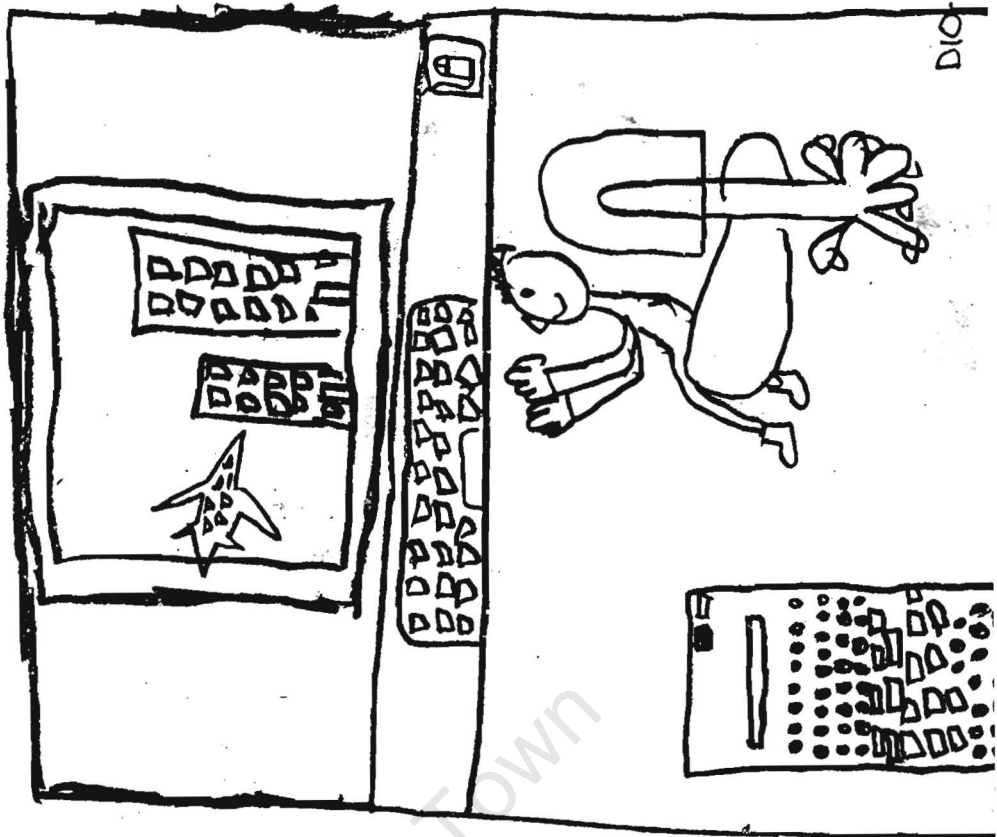


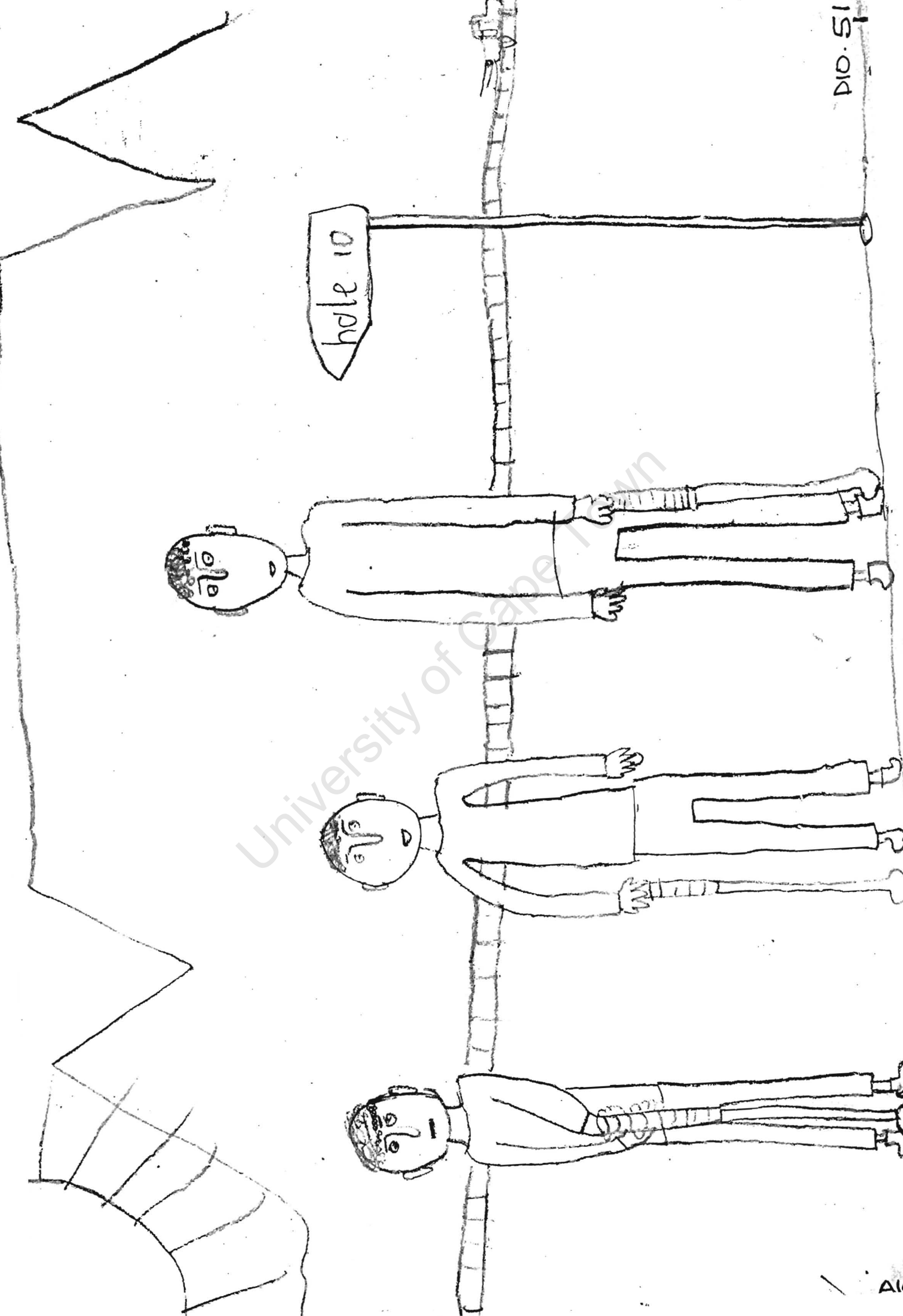


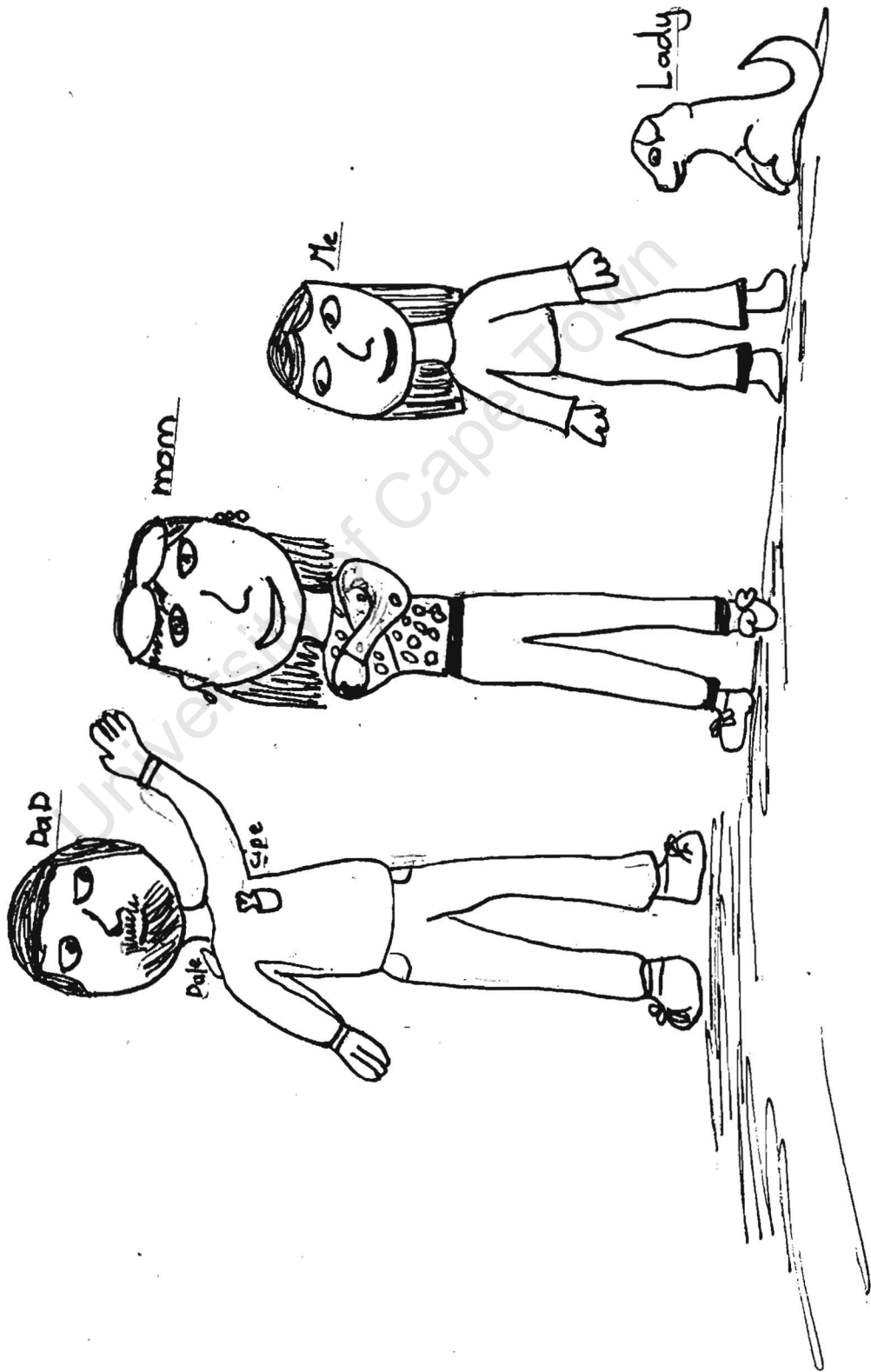
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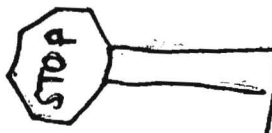
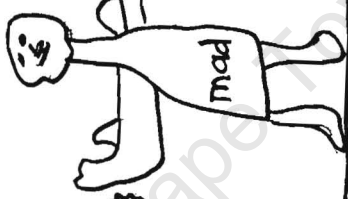
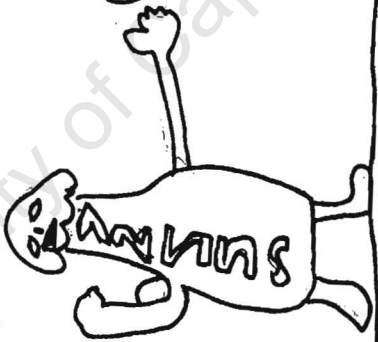
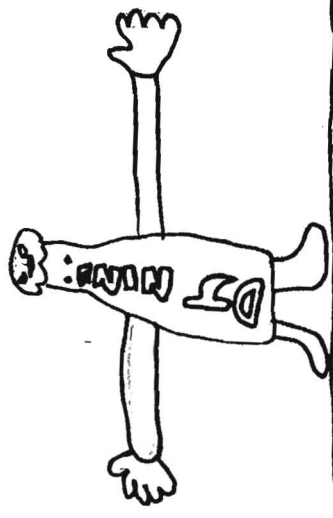








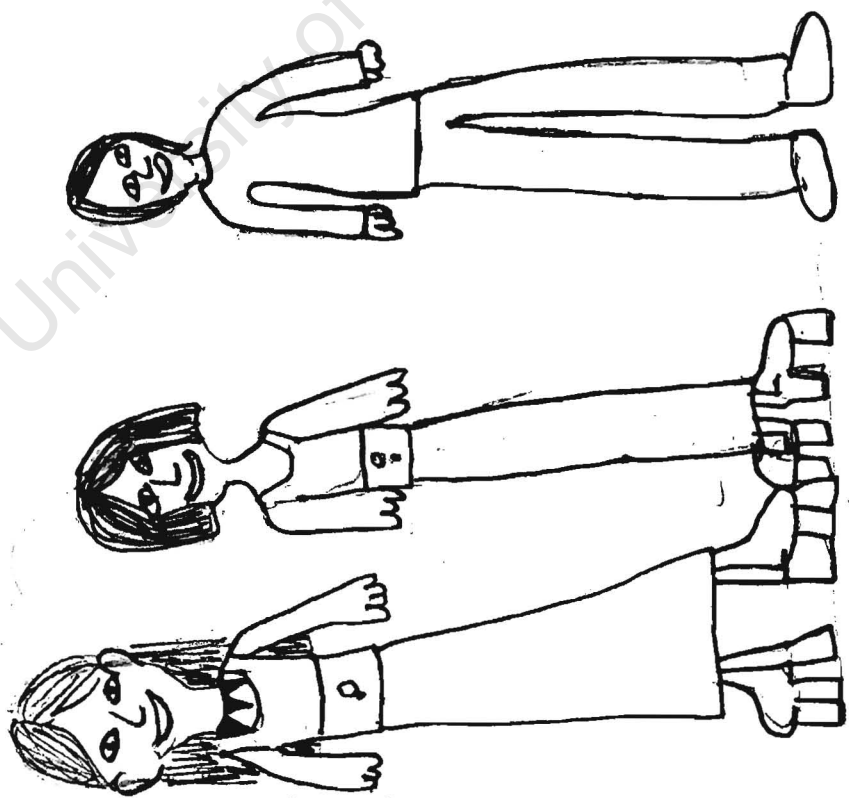




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192 10
Gr 5

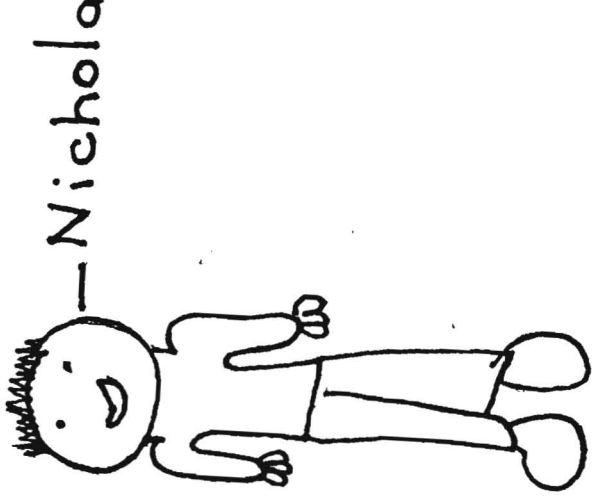
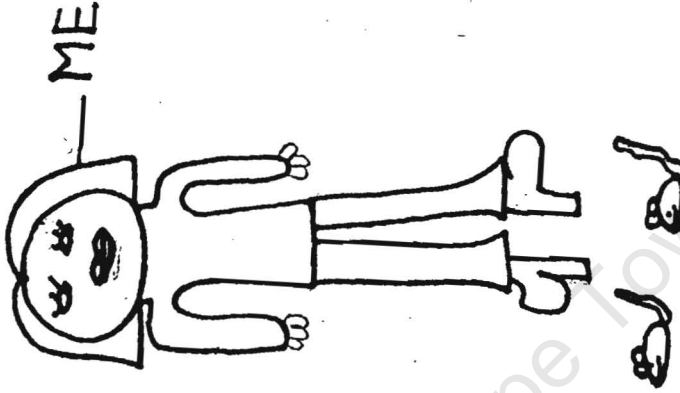
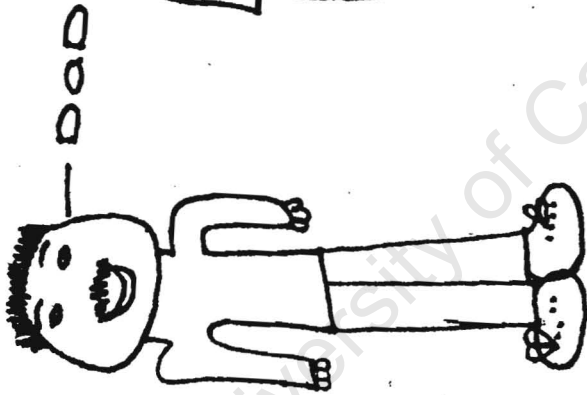
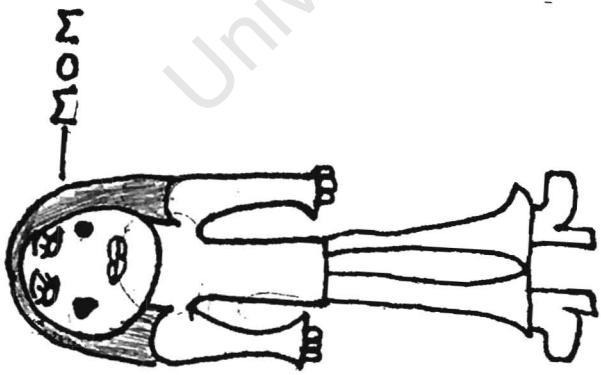




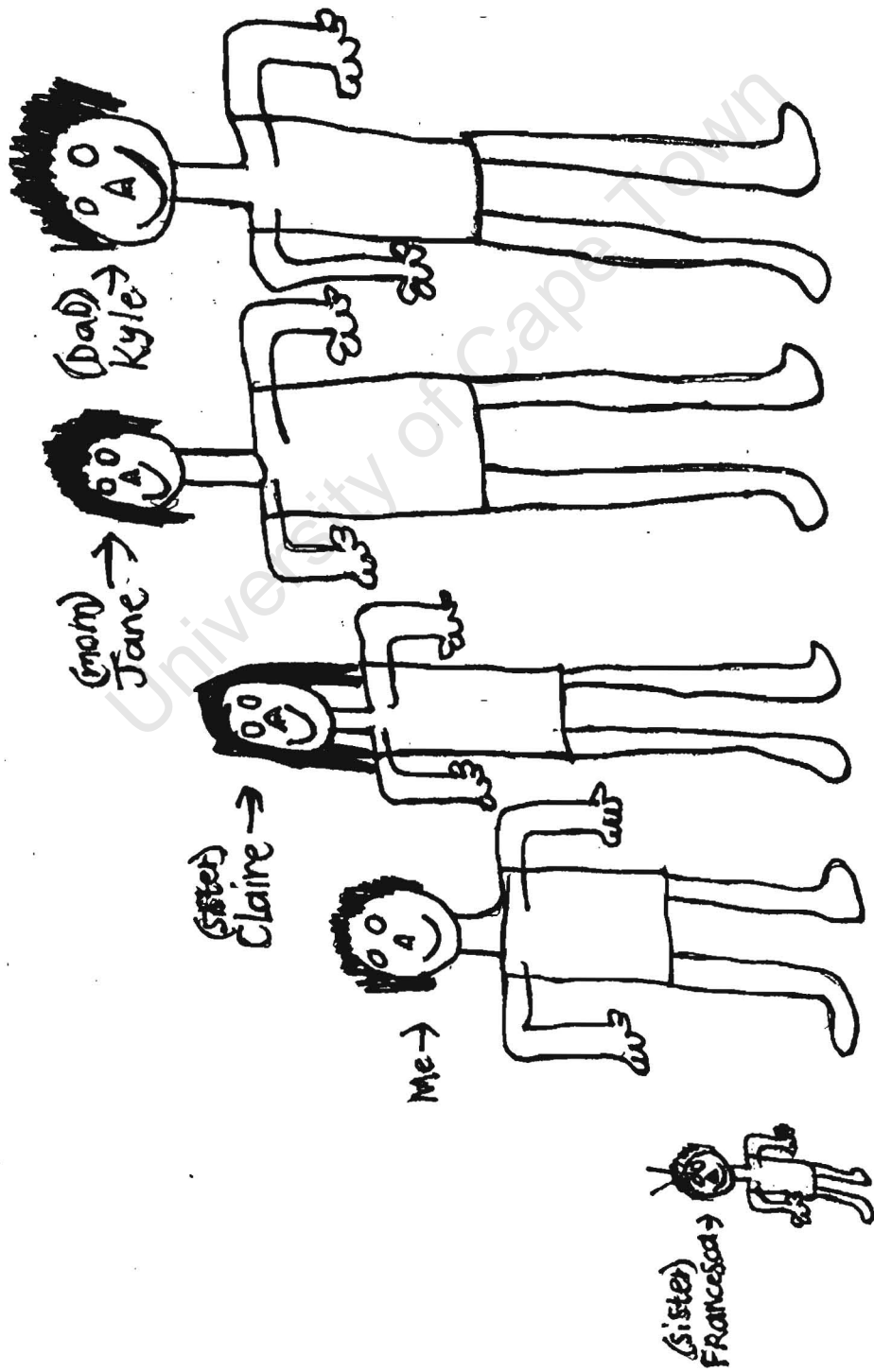
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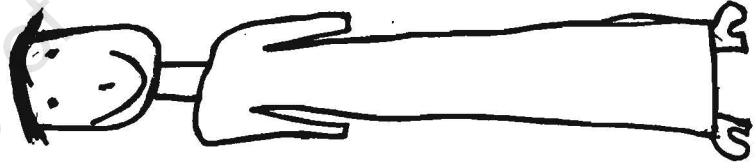
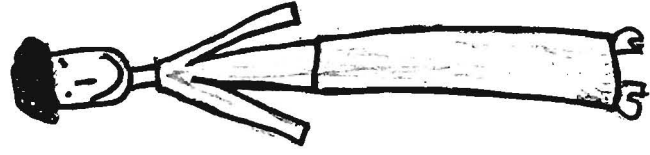
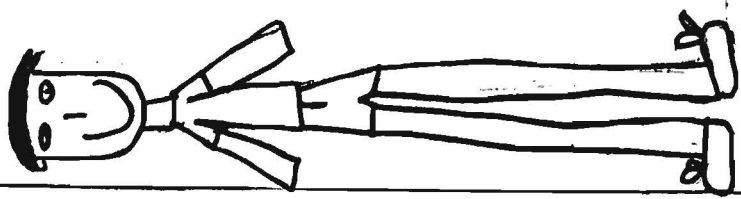




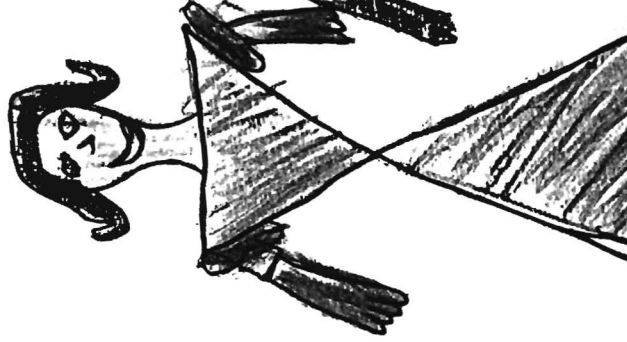
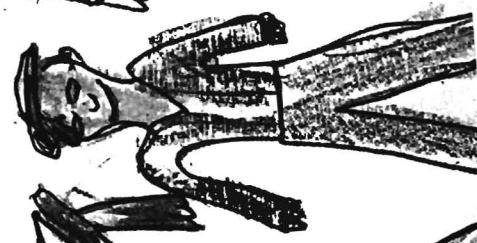
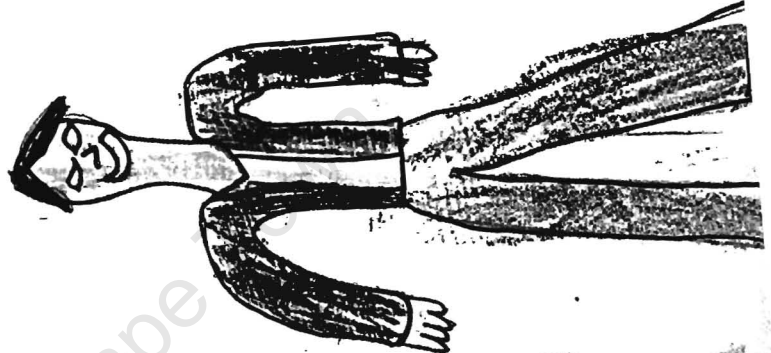
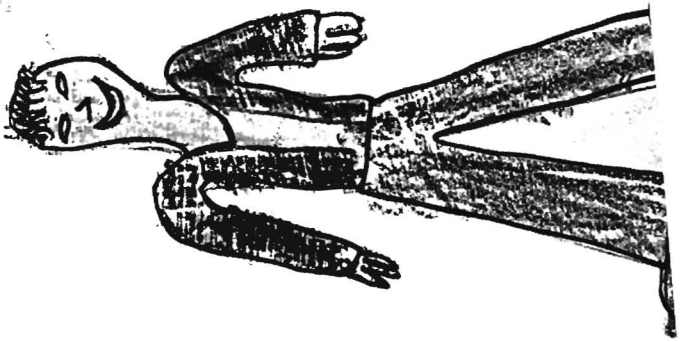
My family



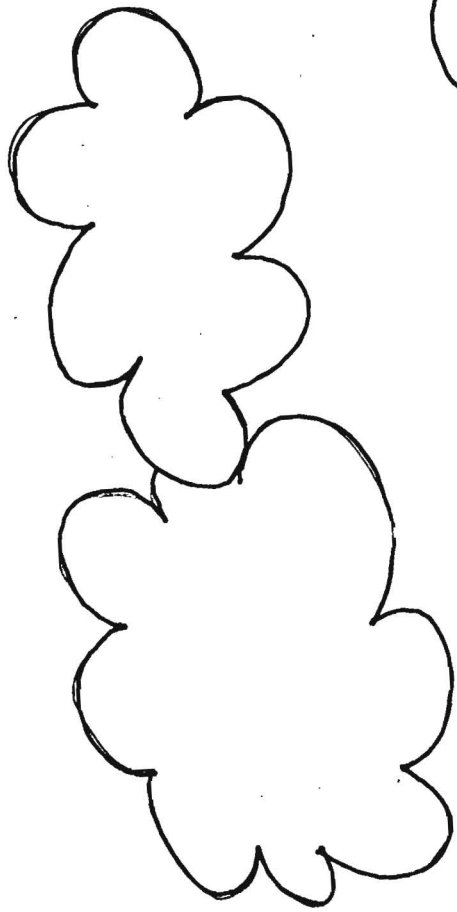
Dad Gran Sister Aunt Mom



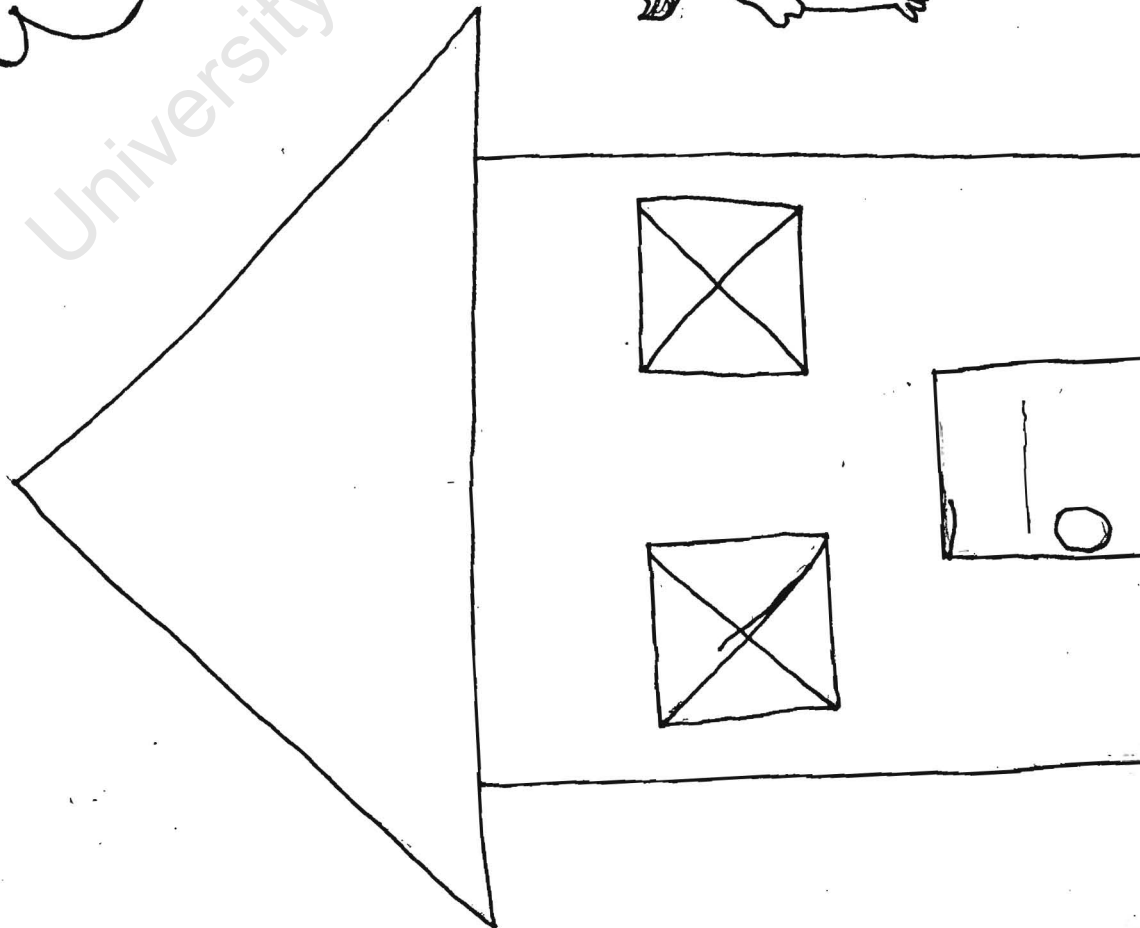
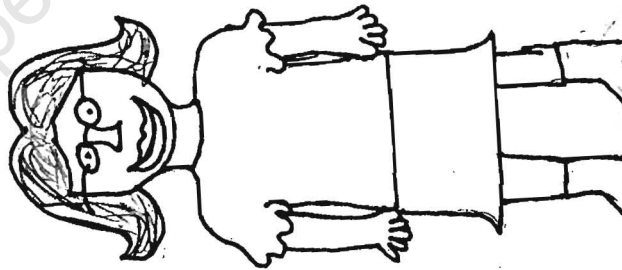
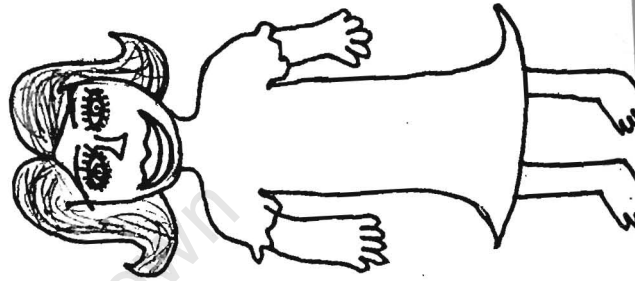
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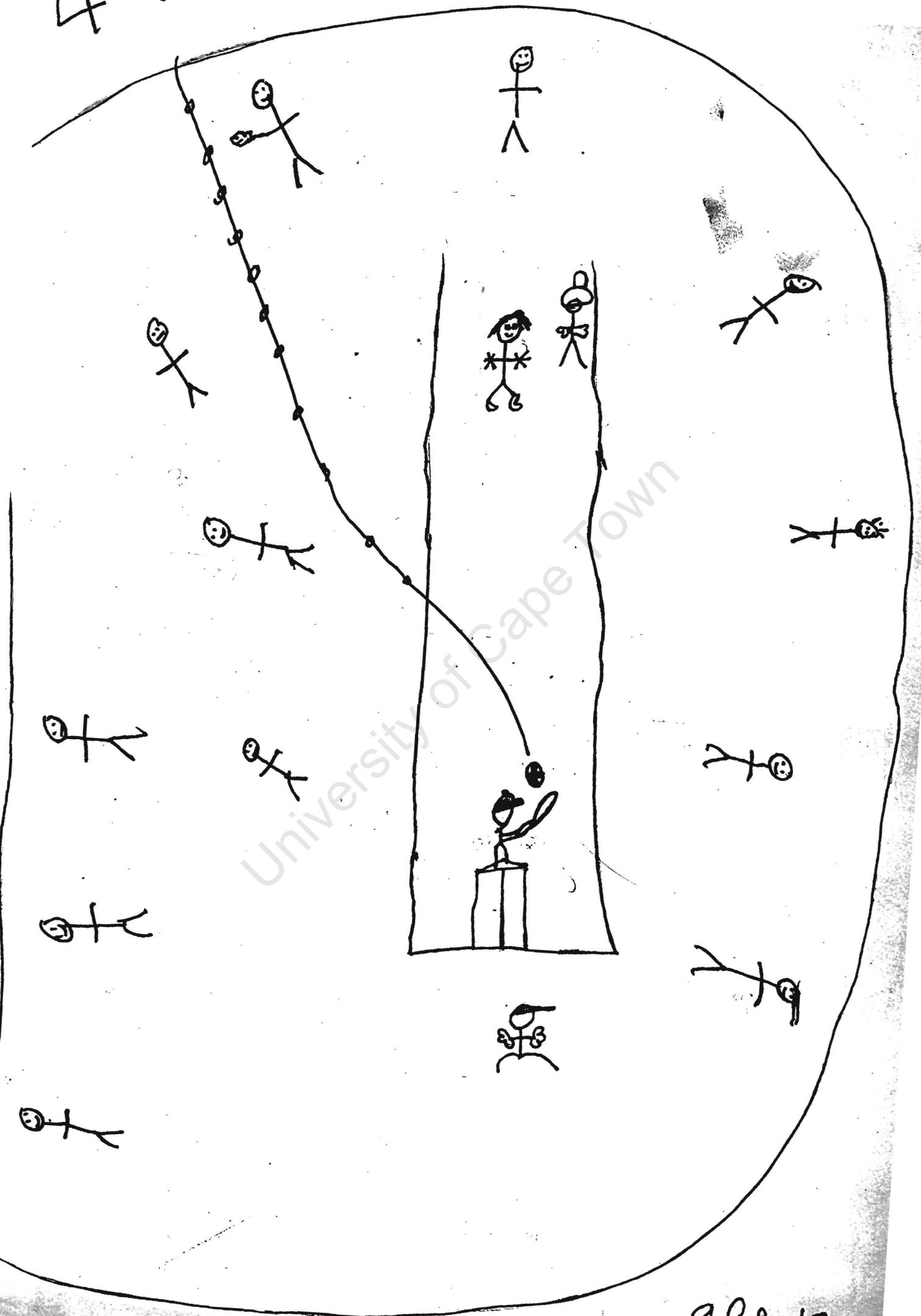


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DIP. 7

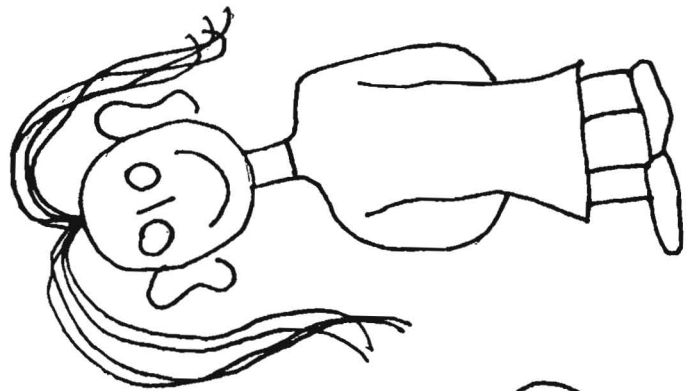
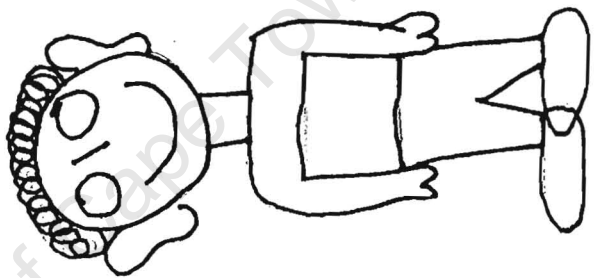
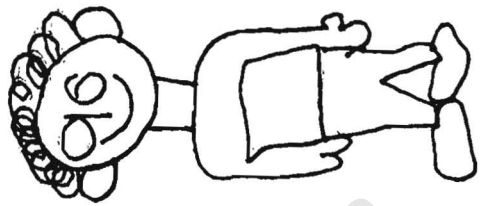


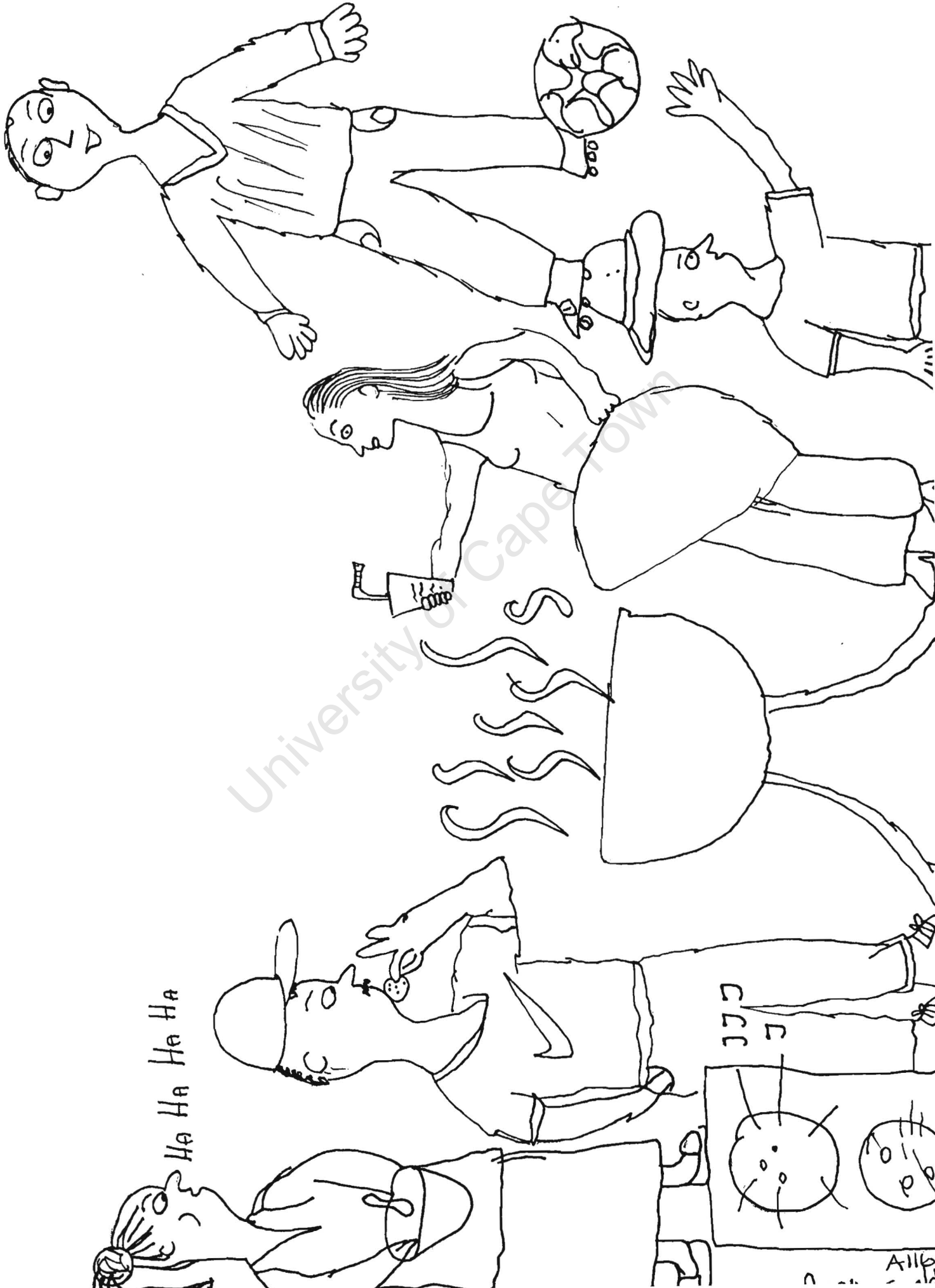


age 10

THE ELEVEN-YEAR-OLD DRAWINGS

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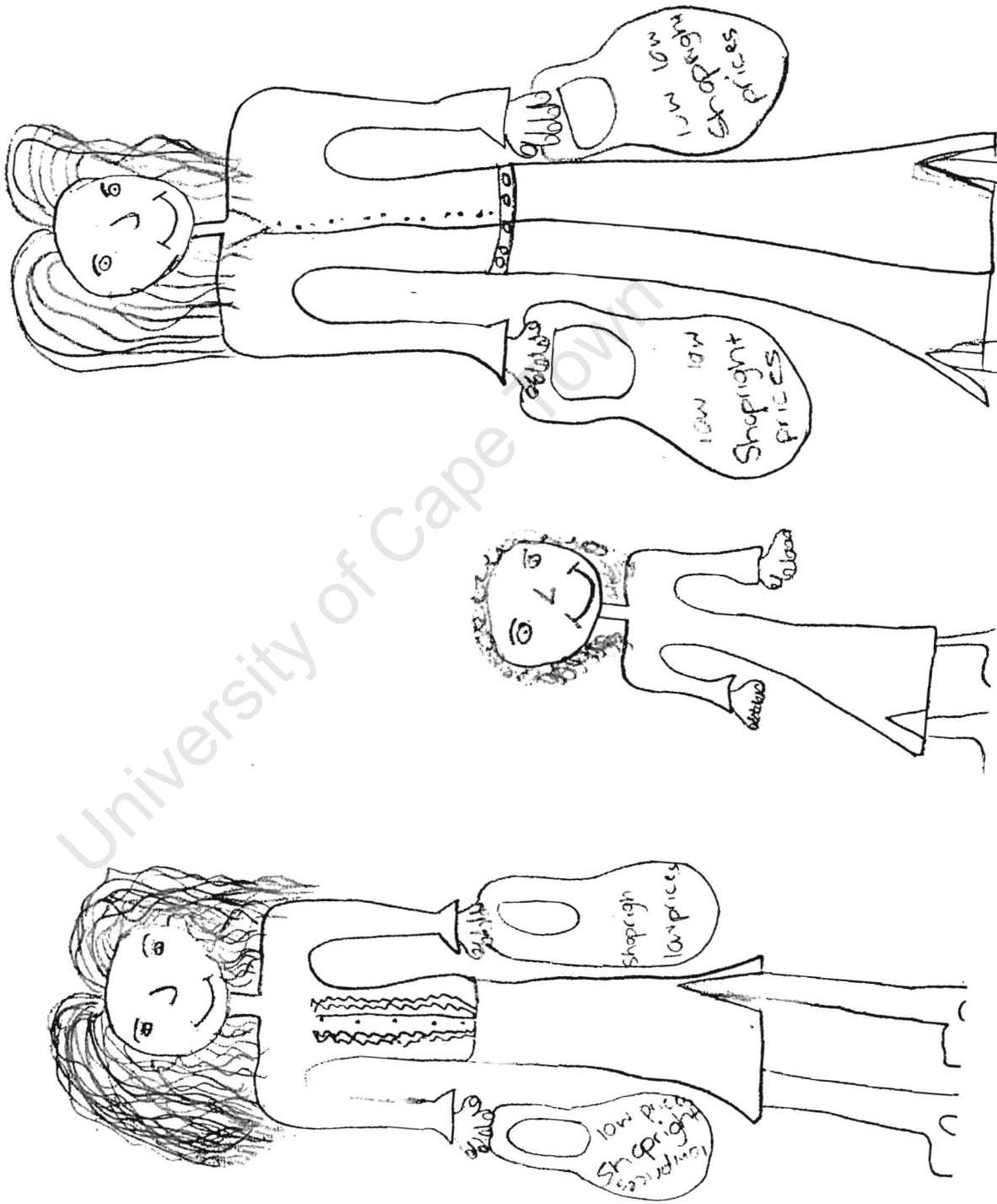
He Ha He Ha

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CCC

11

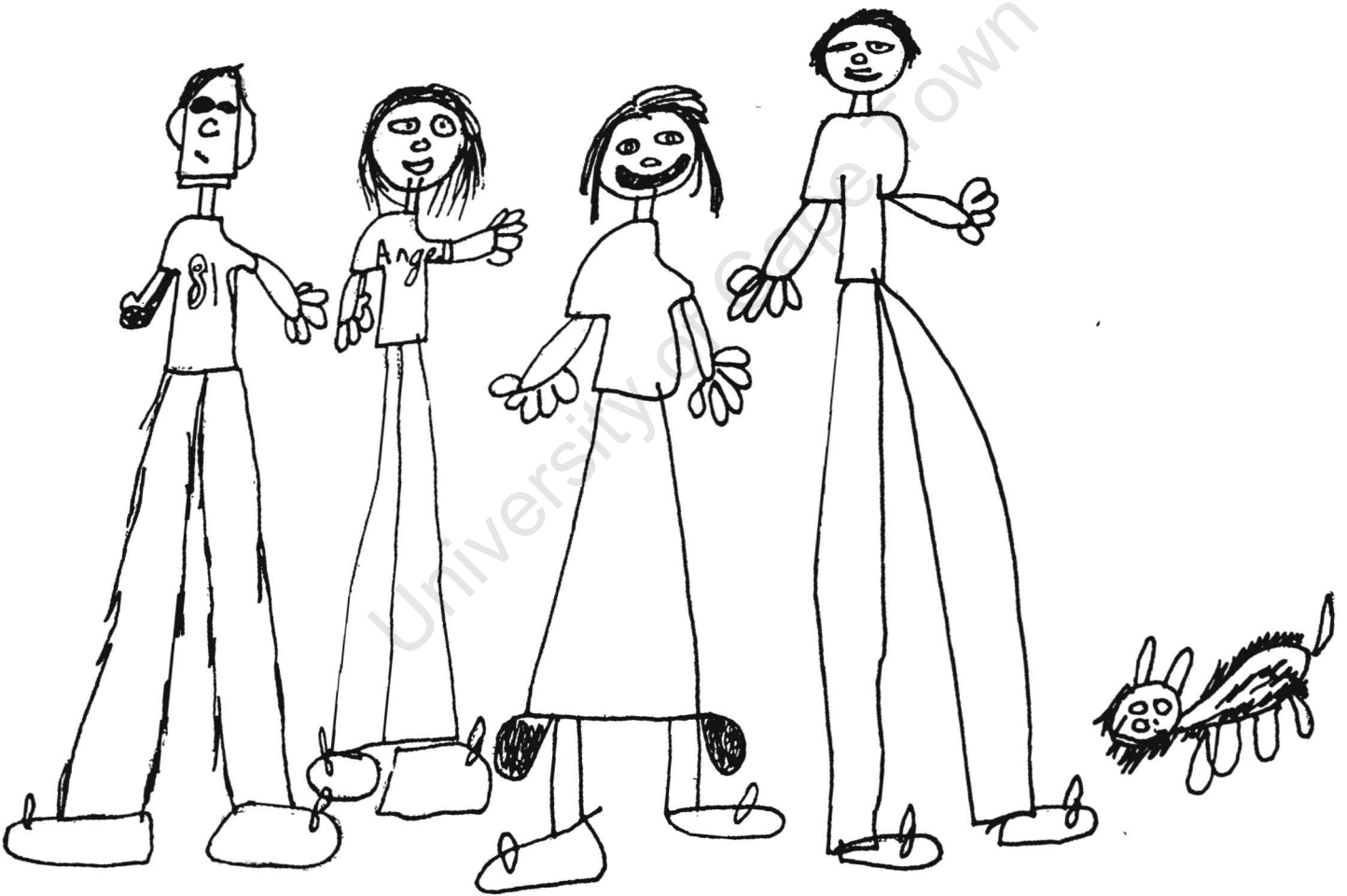
Shopright



Age : 11

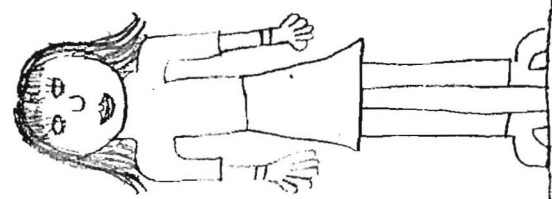
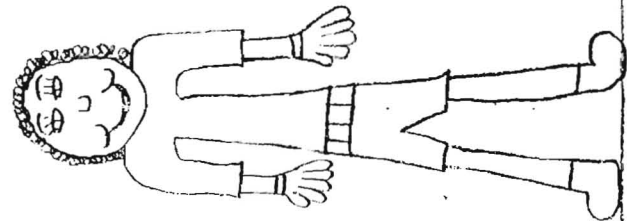
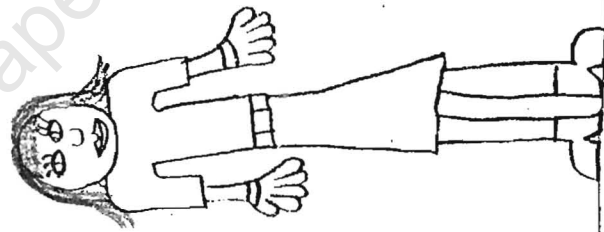
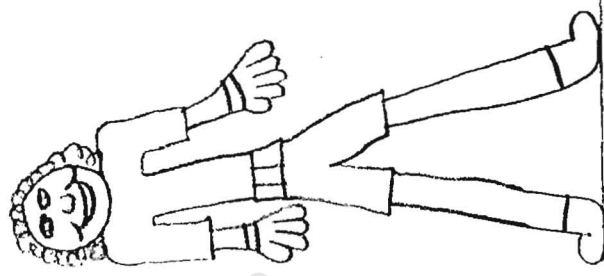
Grade : 5c

Garden . About : family



11 yfs

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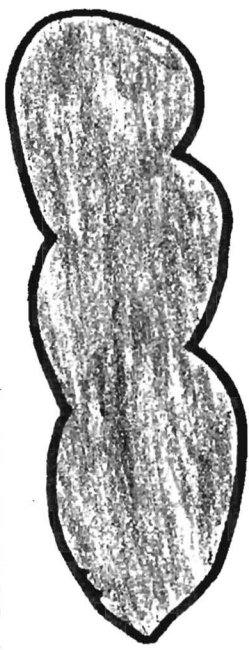




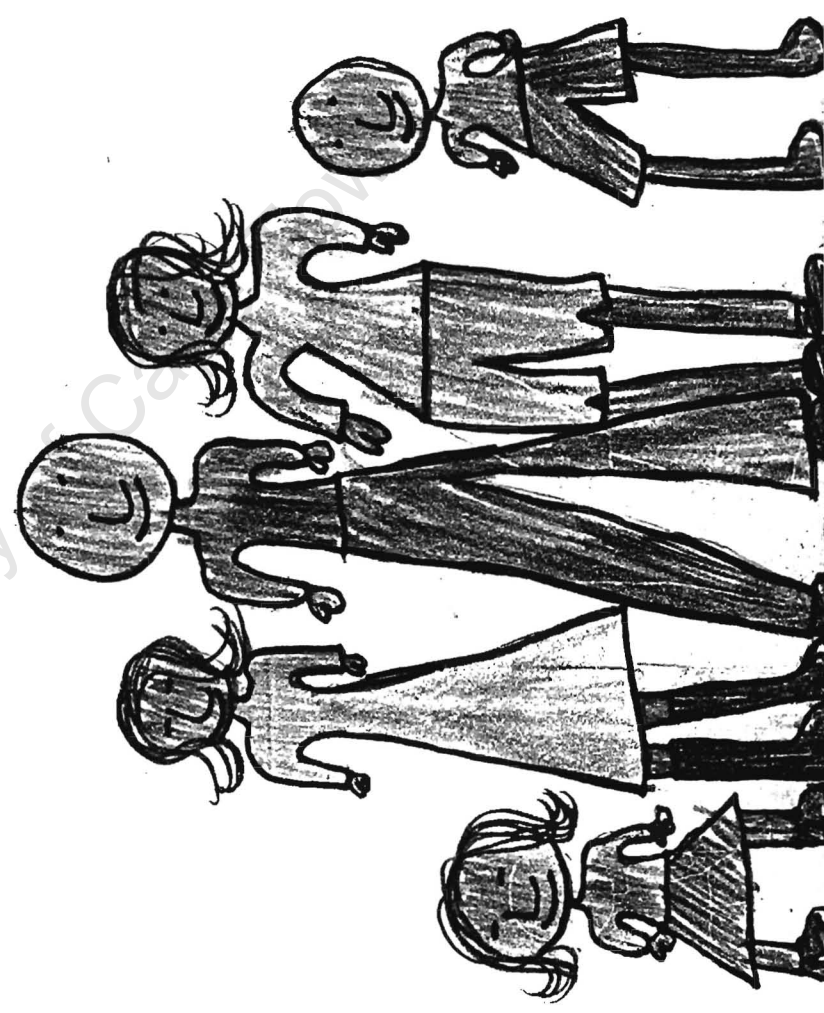
R.H.

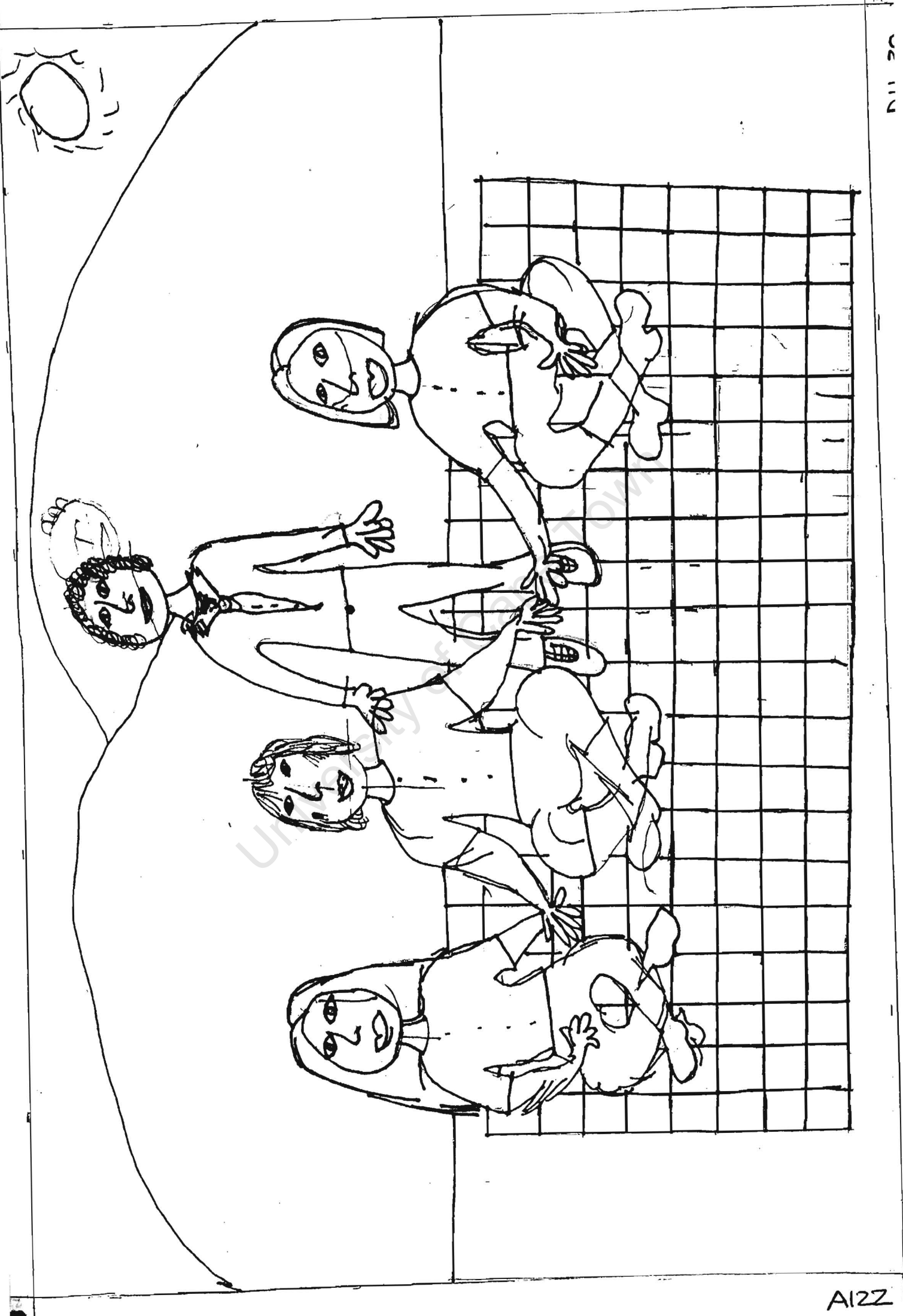
University of Cape Town

At

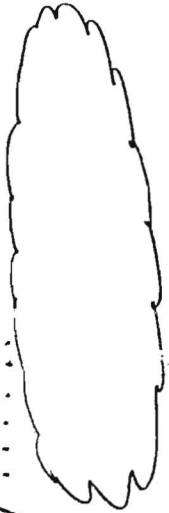


My friendly family

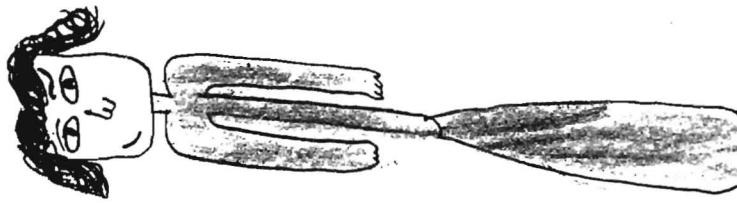
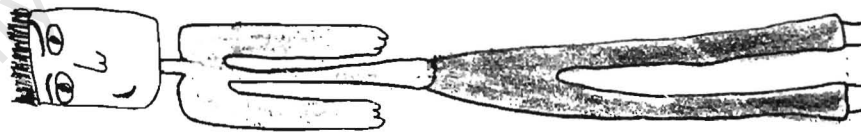
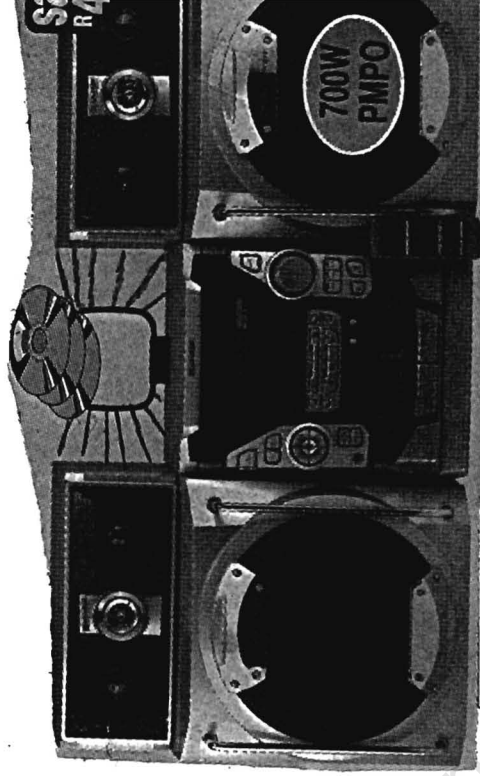
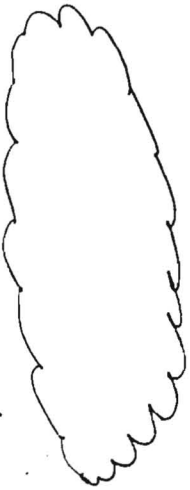




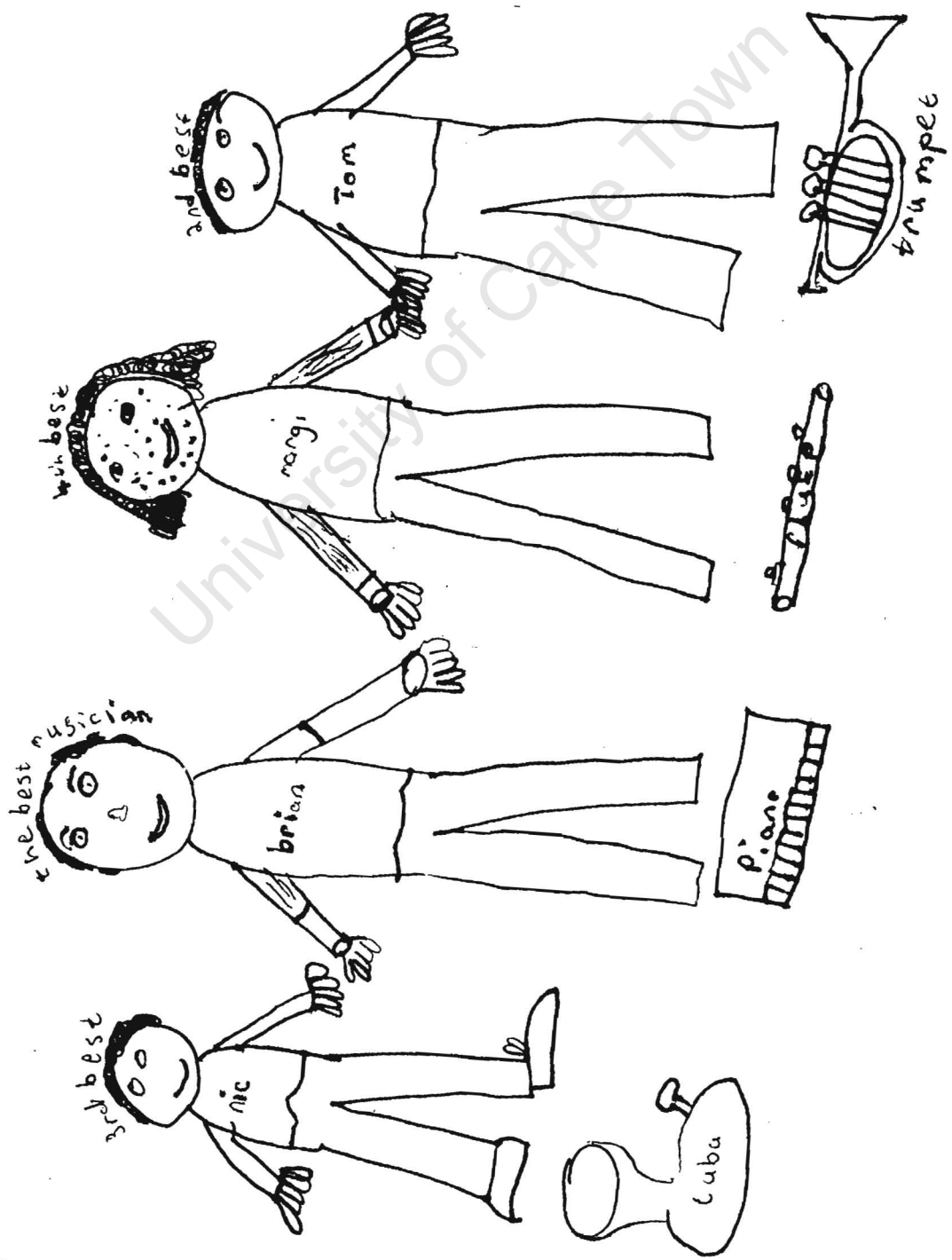
Party



Donny. age...

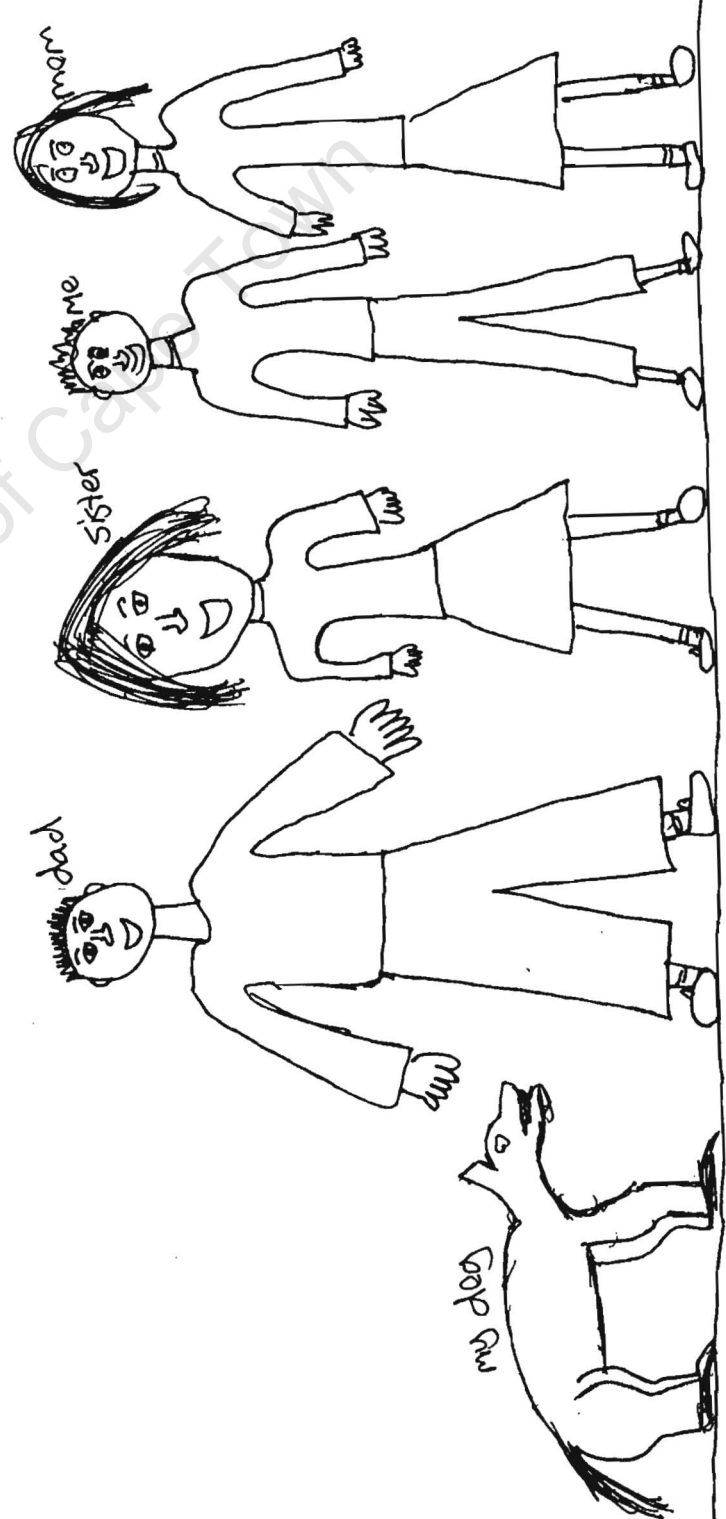


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your view.

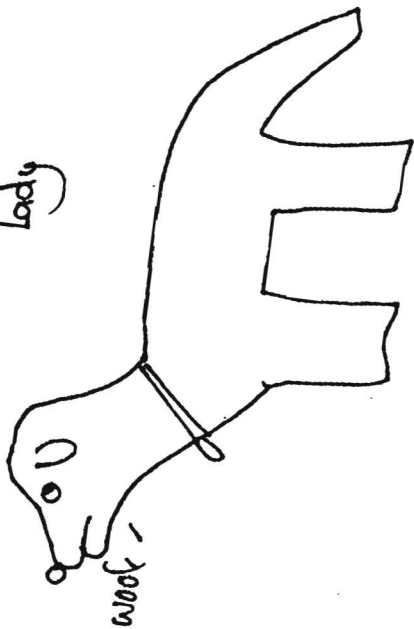
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Animals



lady



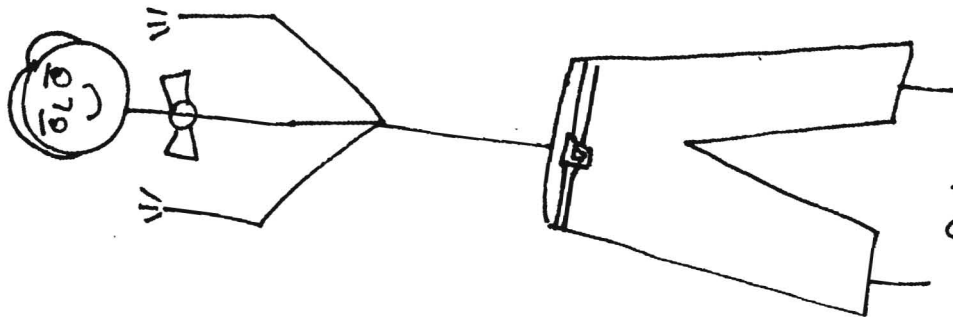
Casey



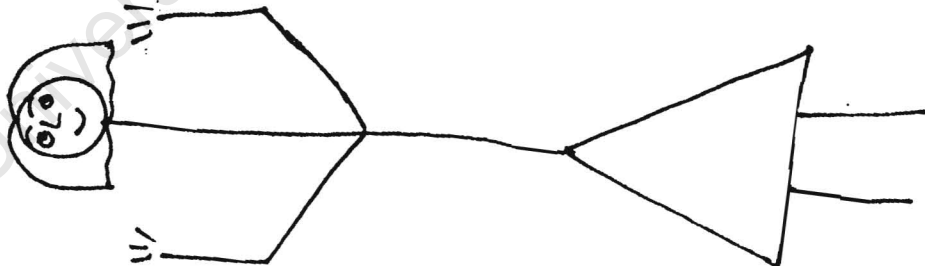
BuDDy



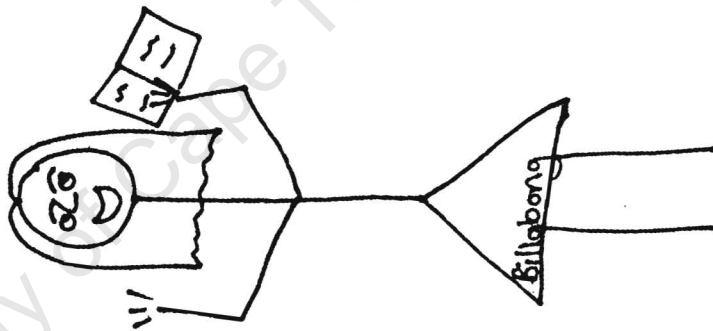
New Family



Dad

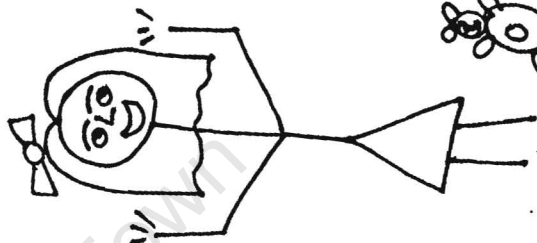


Mom



Billabong

Me

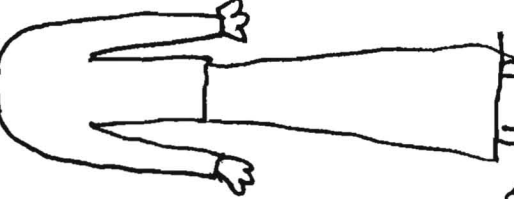




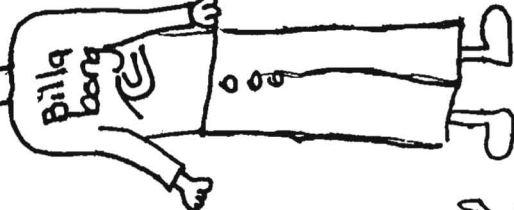
allan



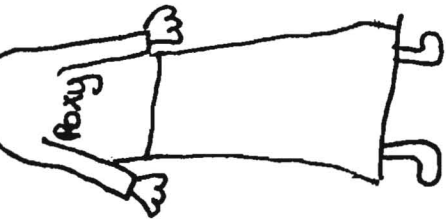
Robyn



Justin



Lauren



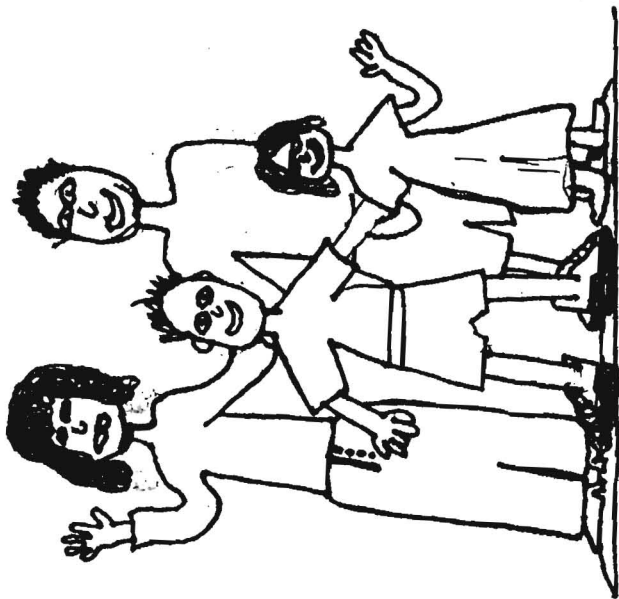
fergus



Smudge



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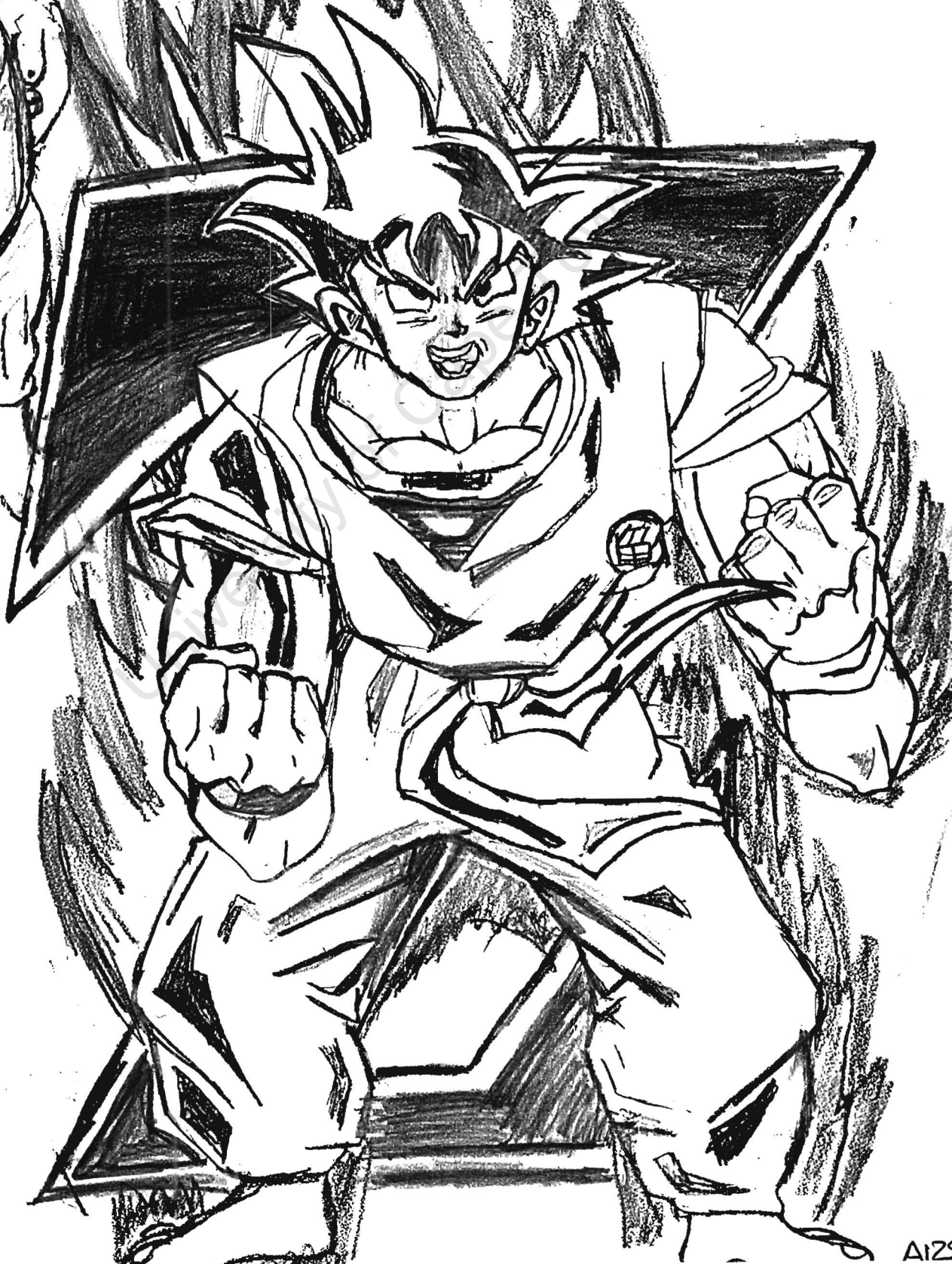


11 years boy

Done by Hayden

DRAGONBALL

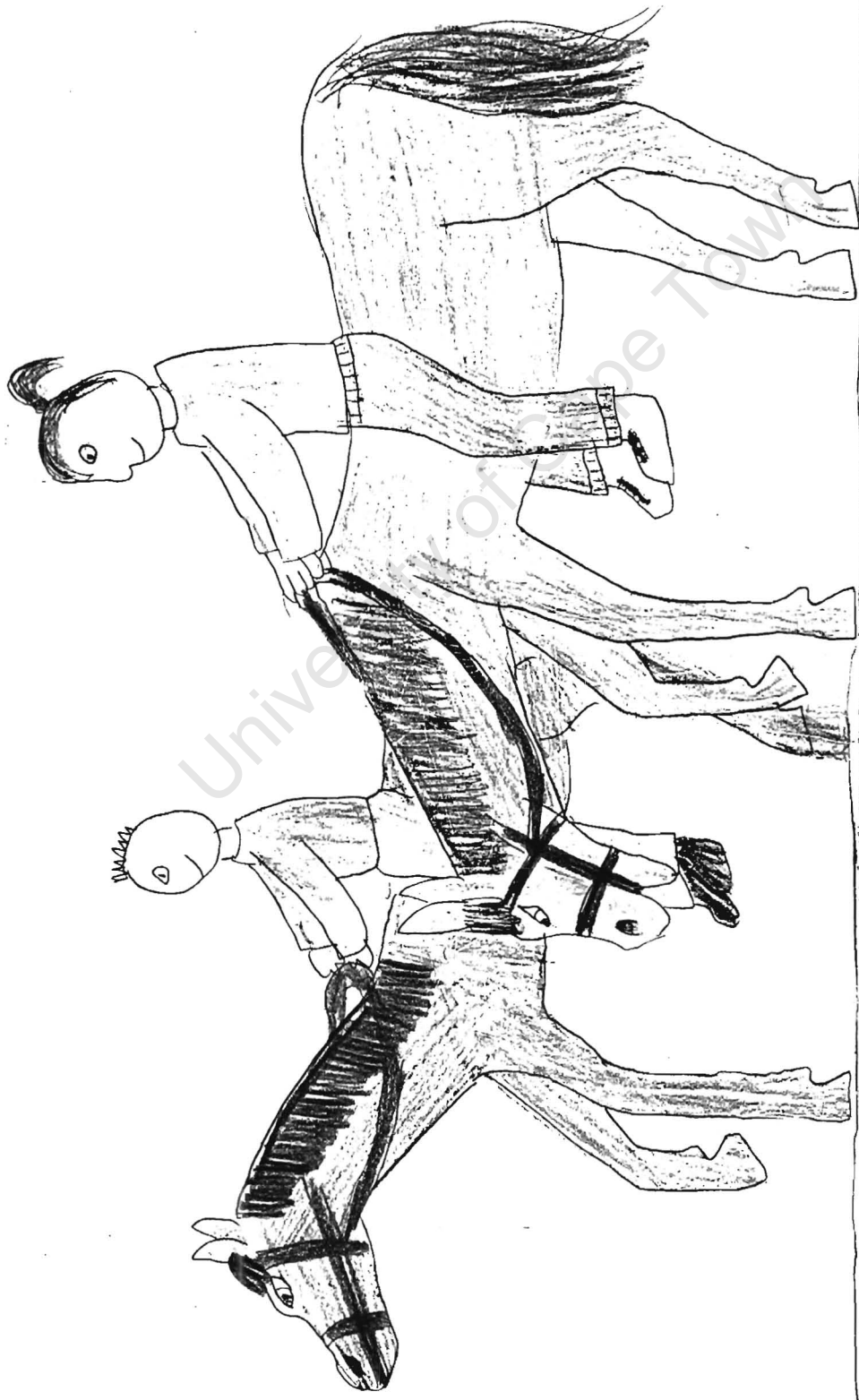
D11-46



KYONOHIMIZU R

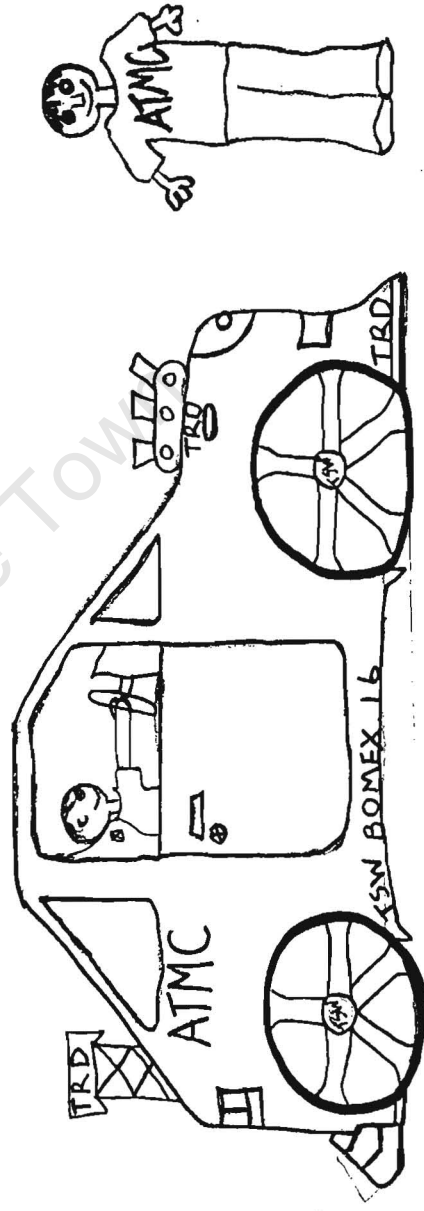
A129



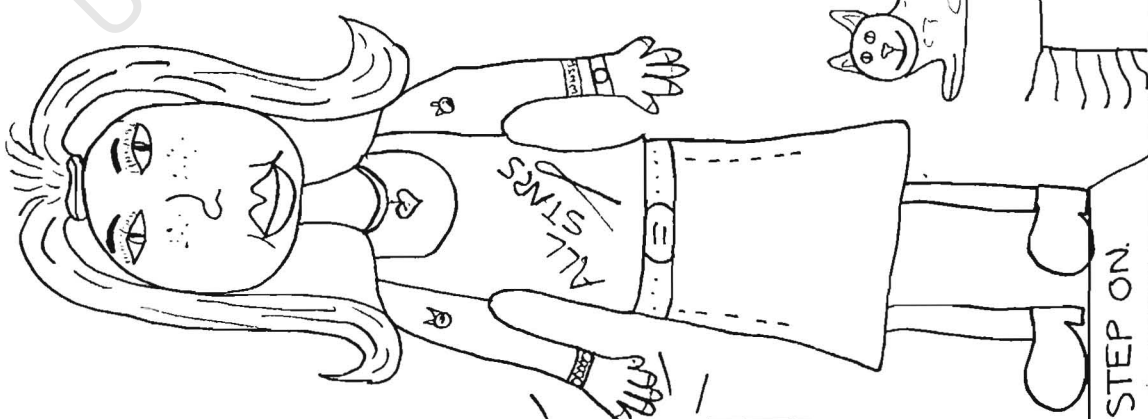
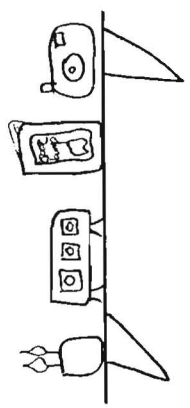


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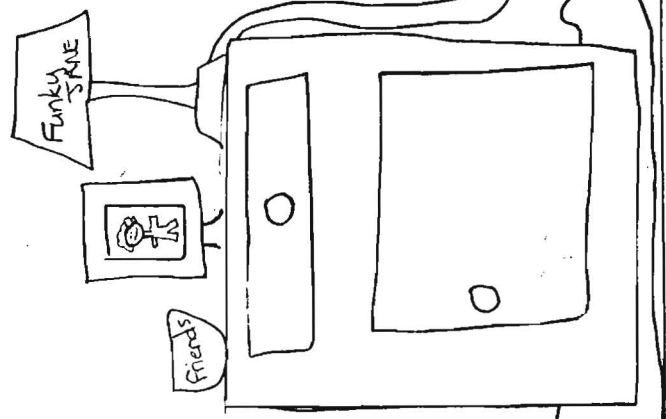
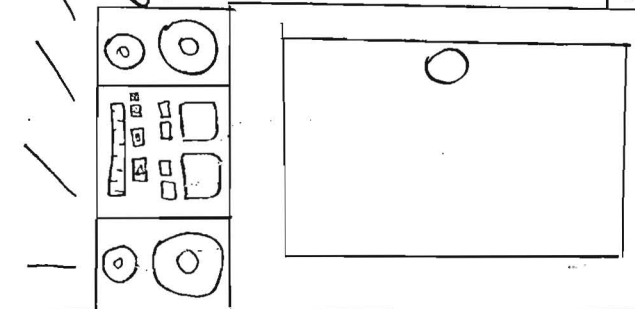
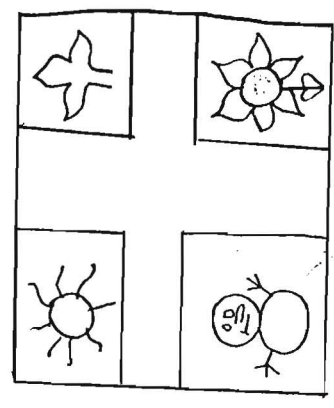
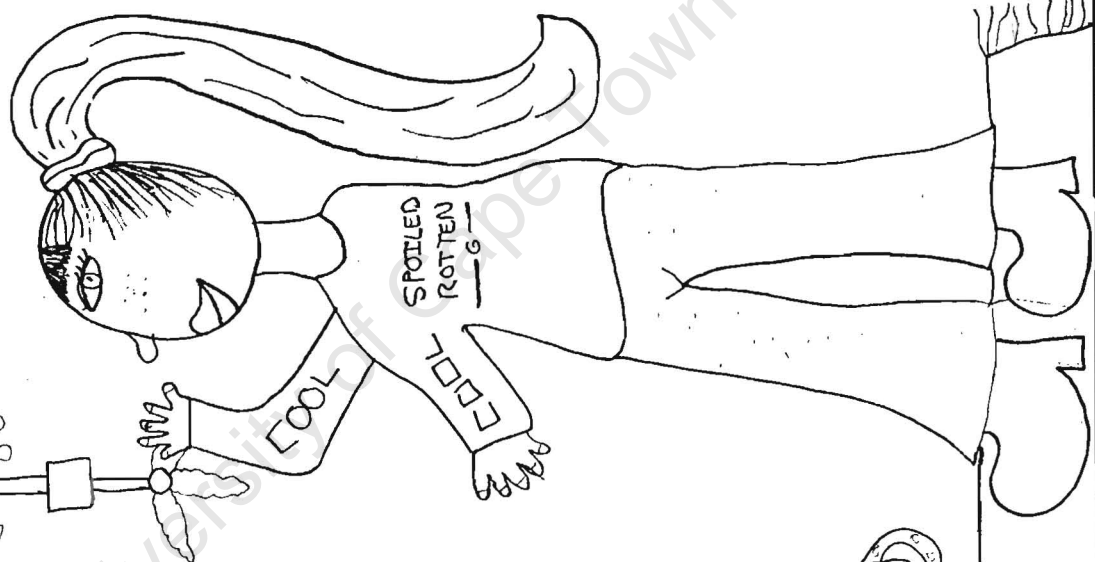
boy



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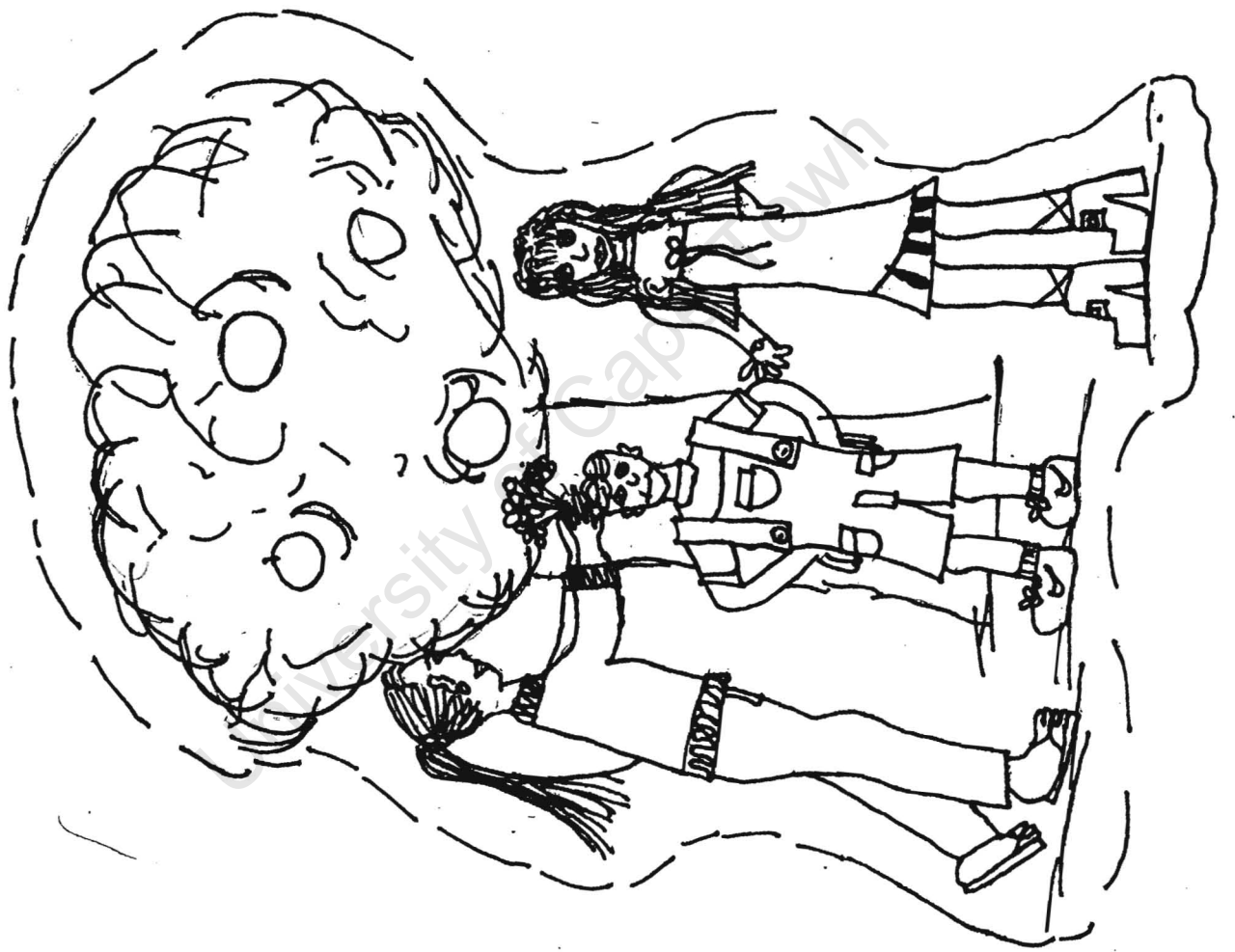
STEP ON.



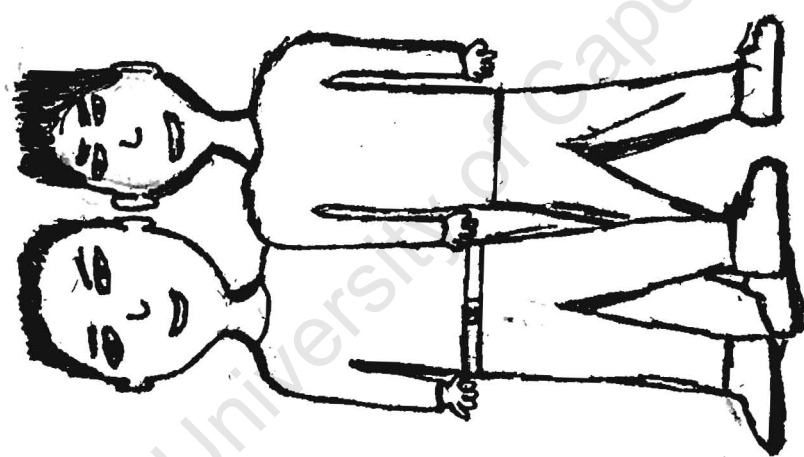
11 Boy

field





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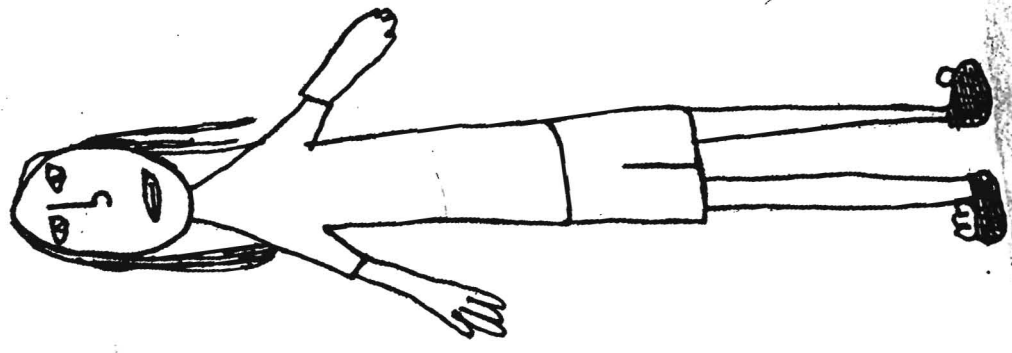
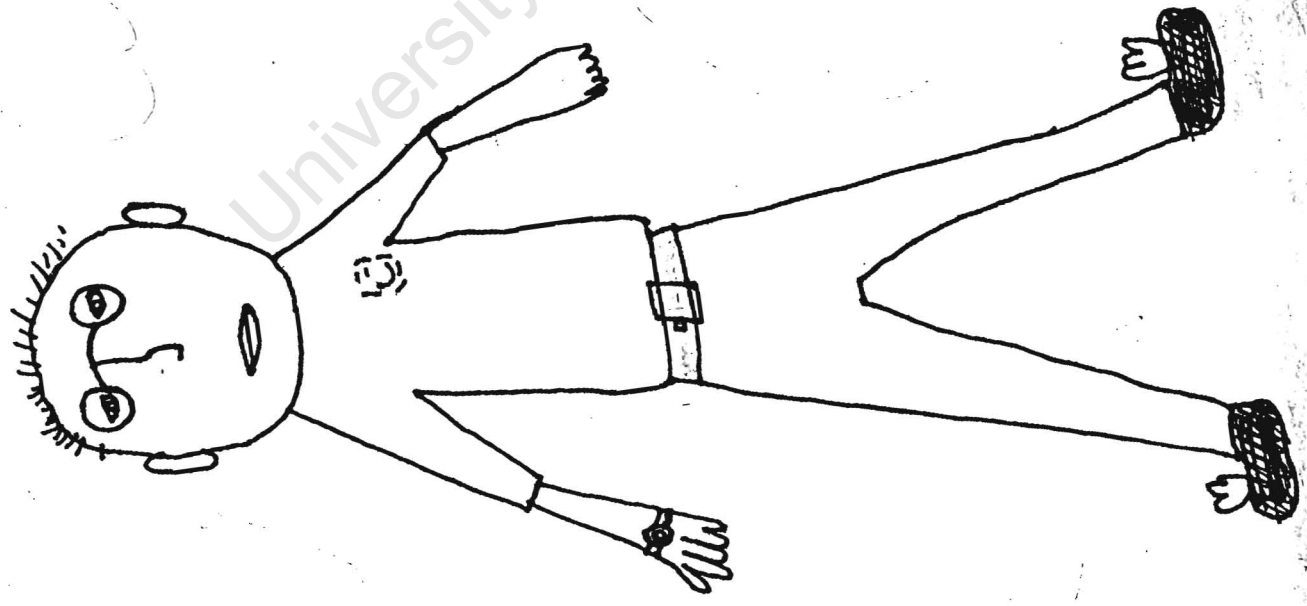
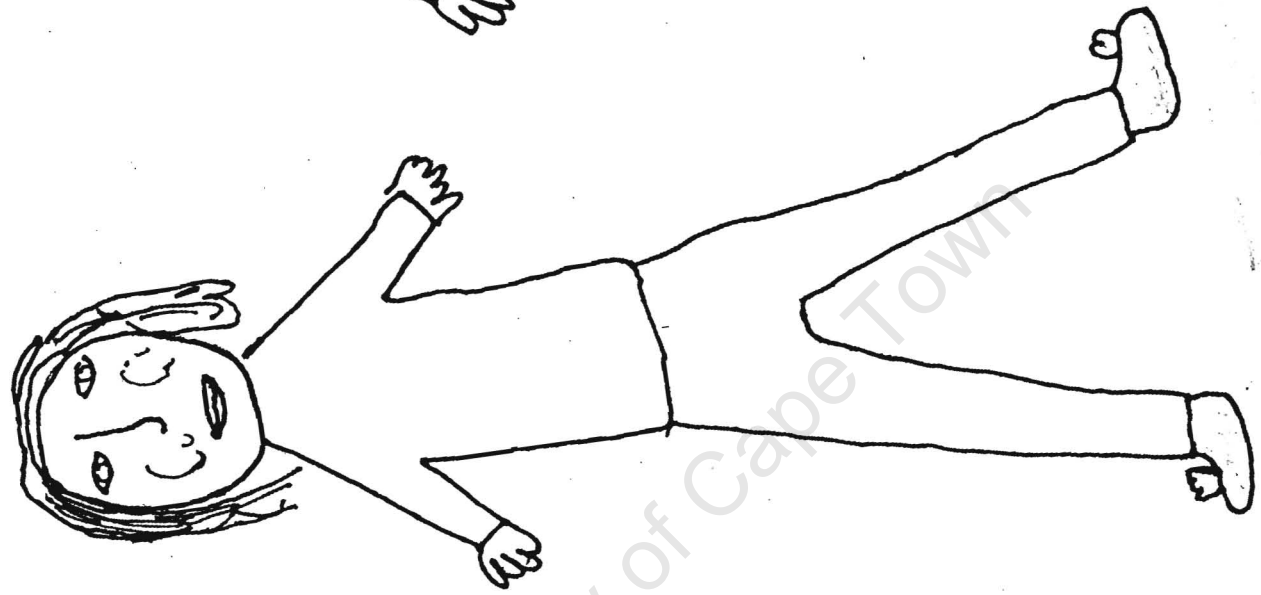
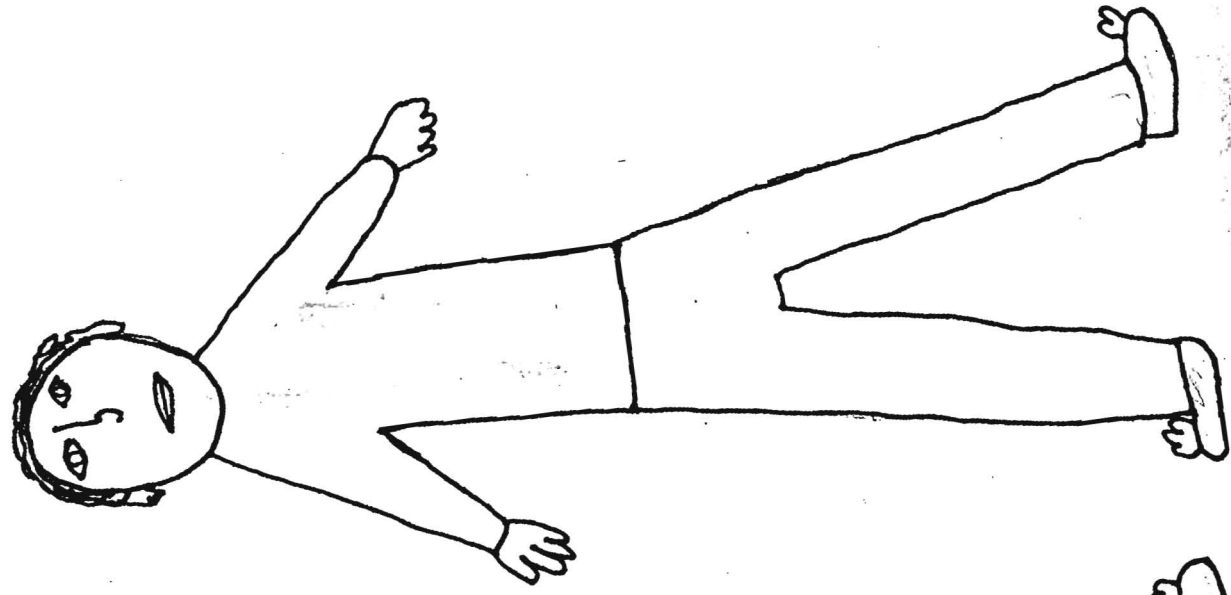


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WALLACE FERNANDES

5K

11 years

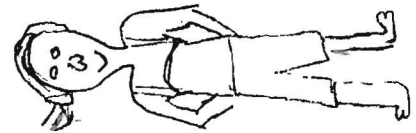
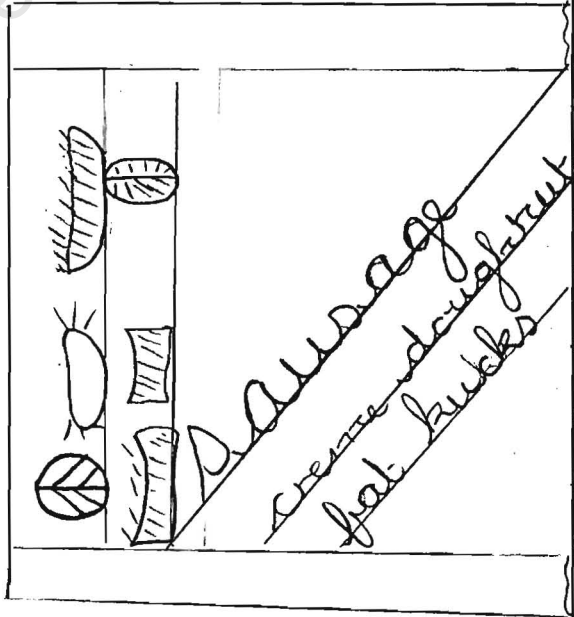


D11.67

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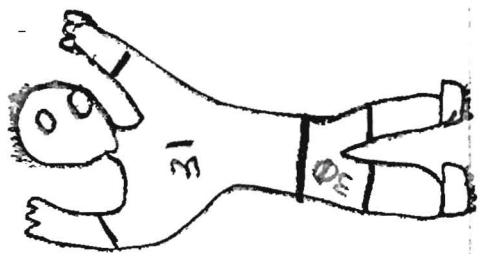
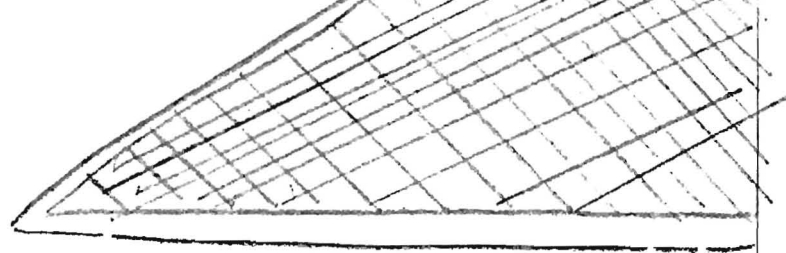
SHOPS

D 11. 69



A138

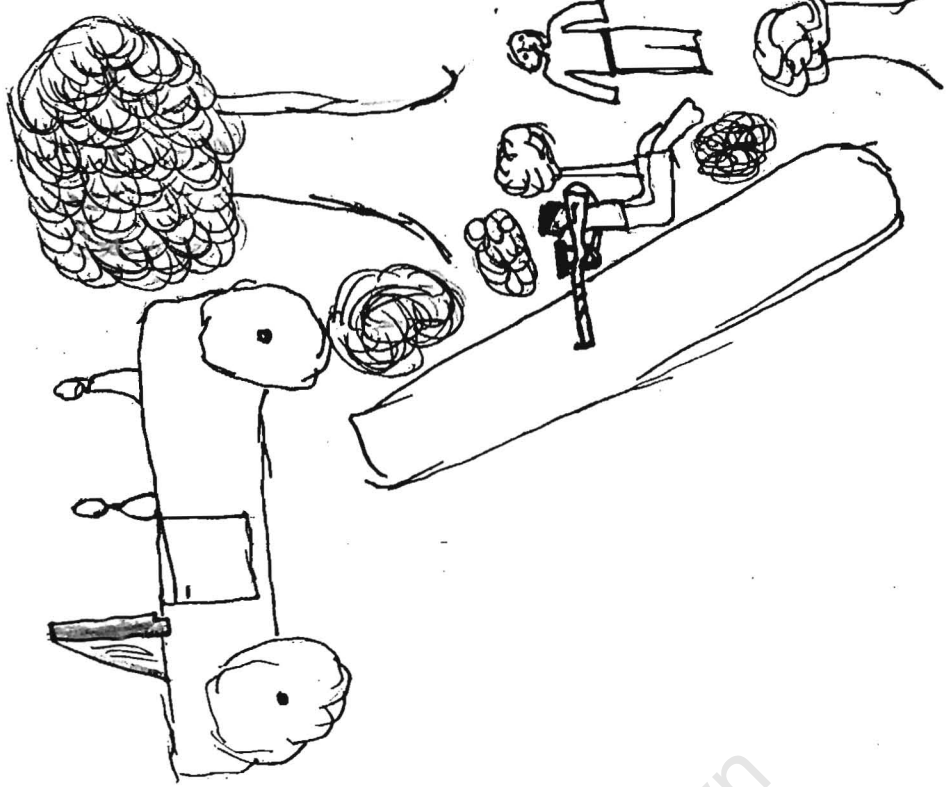
age: 11 years



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THE TWELVE-YEAR-OLD DRAWINGS

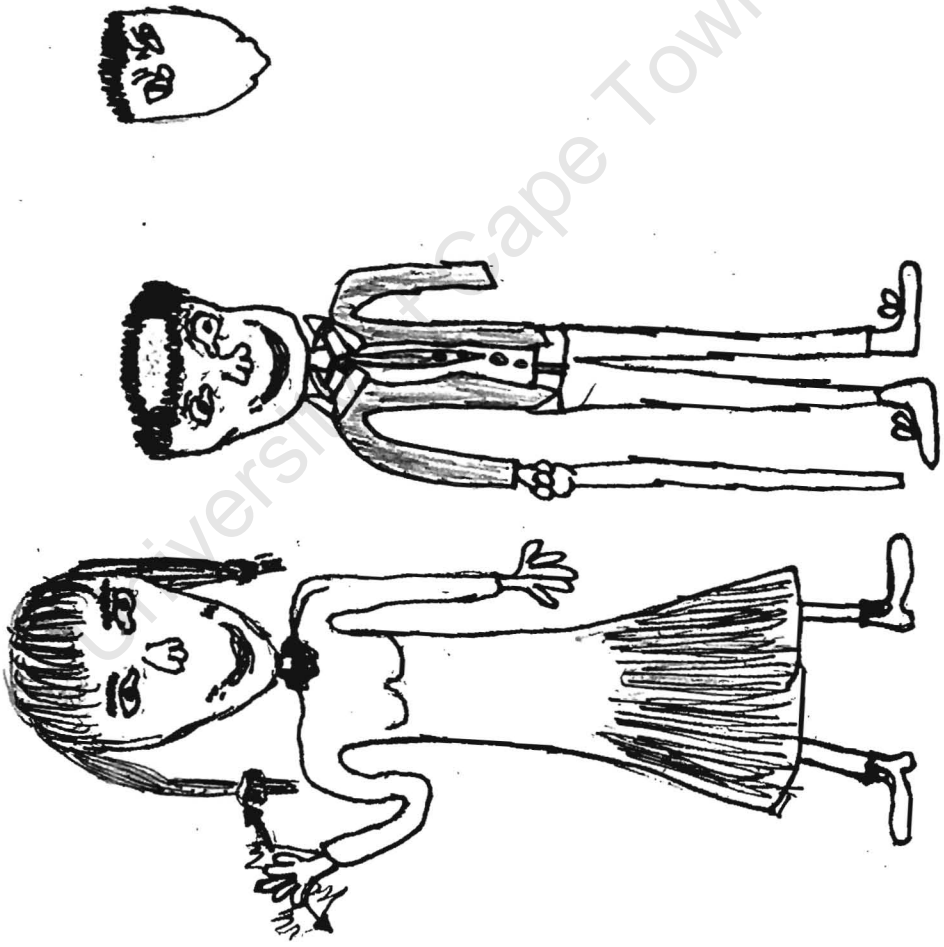
University of Cape Town

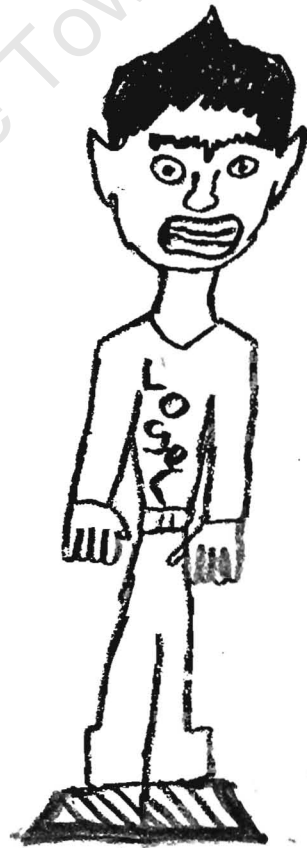


University of Cape Town

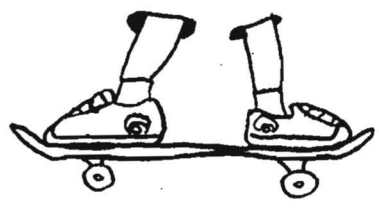


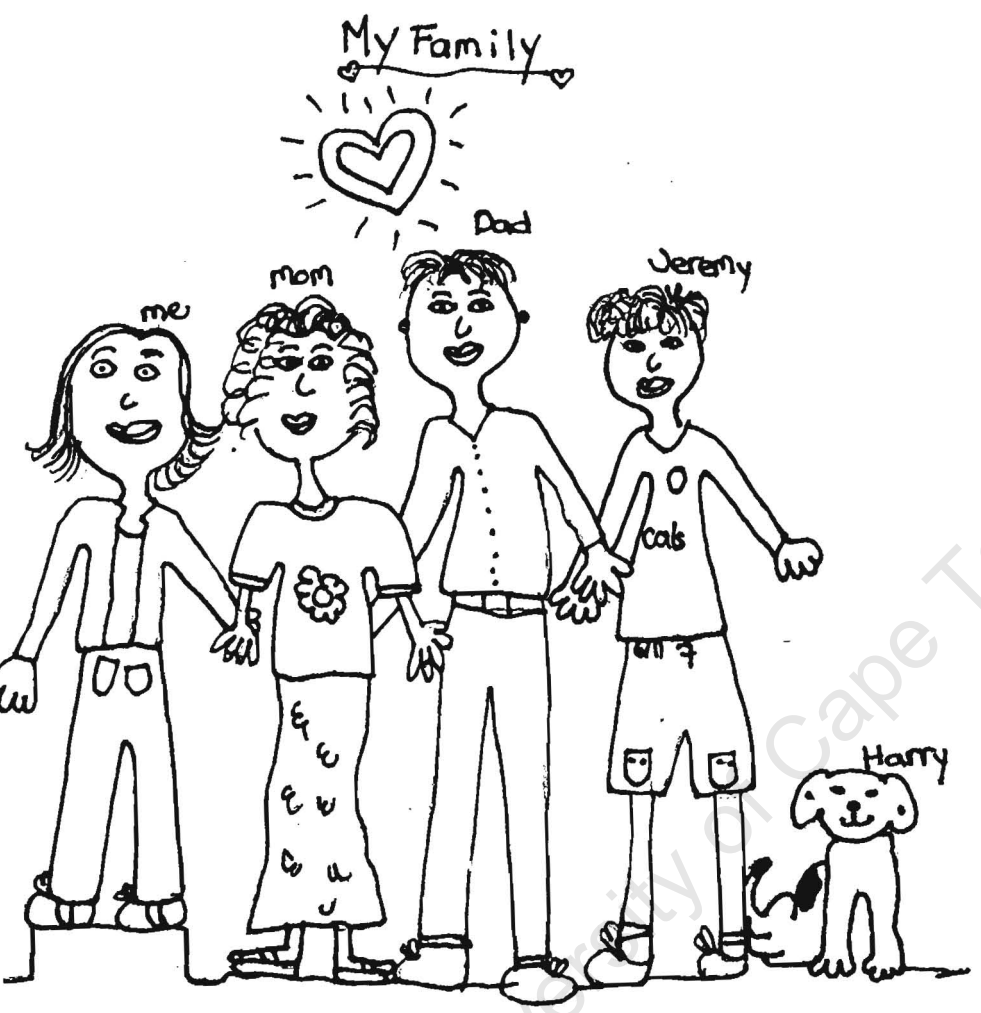
Pr. 41





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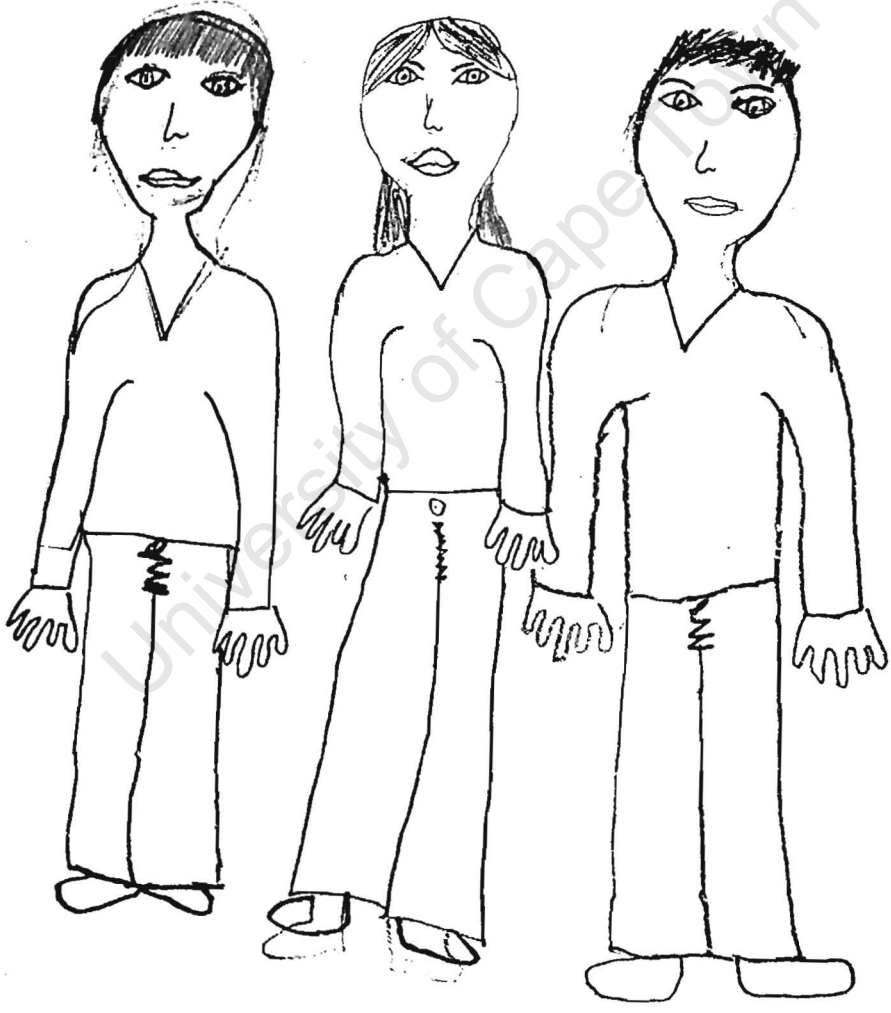


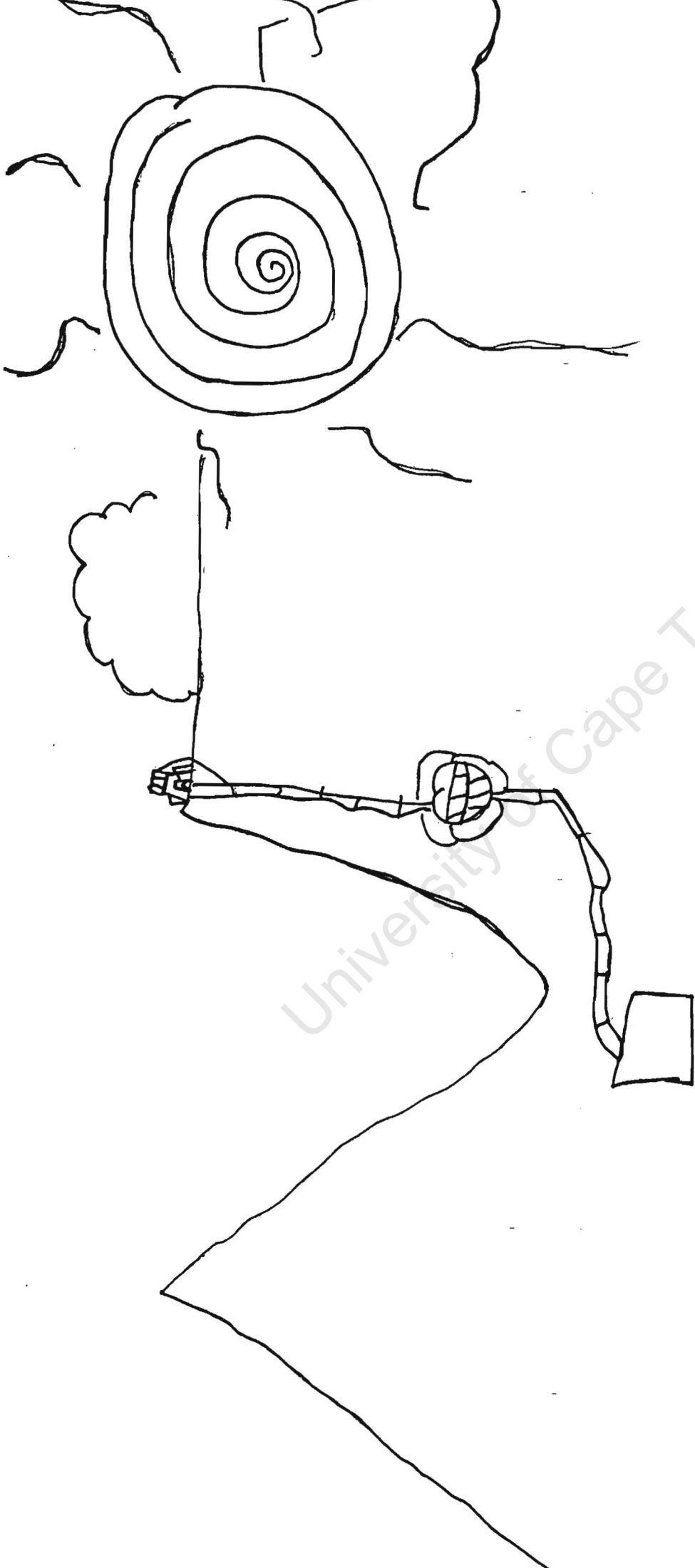


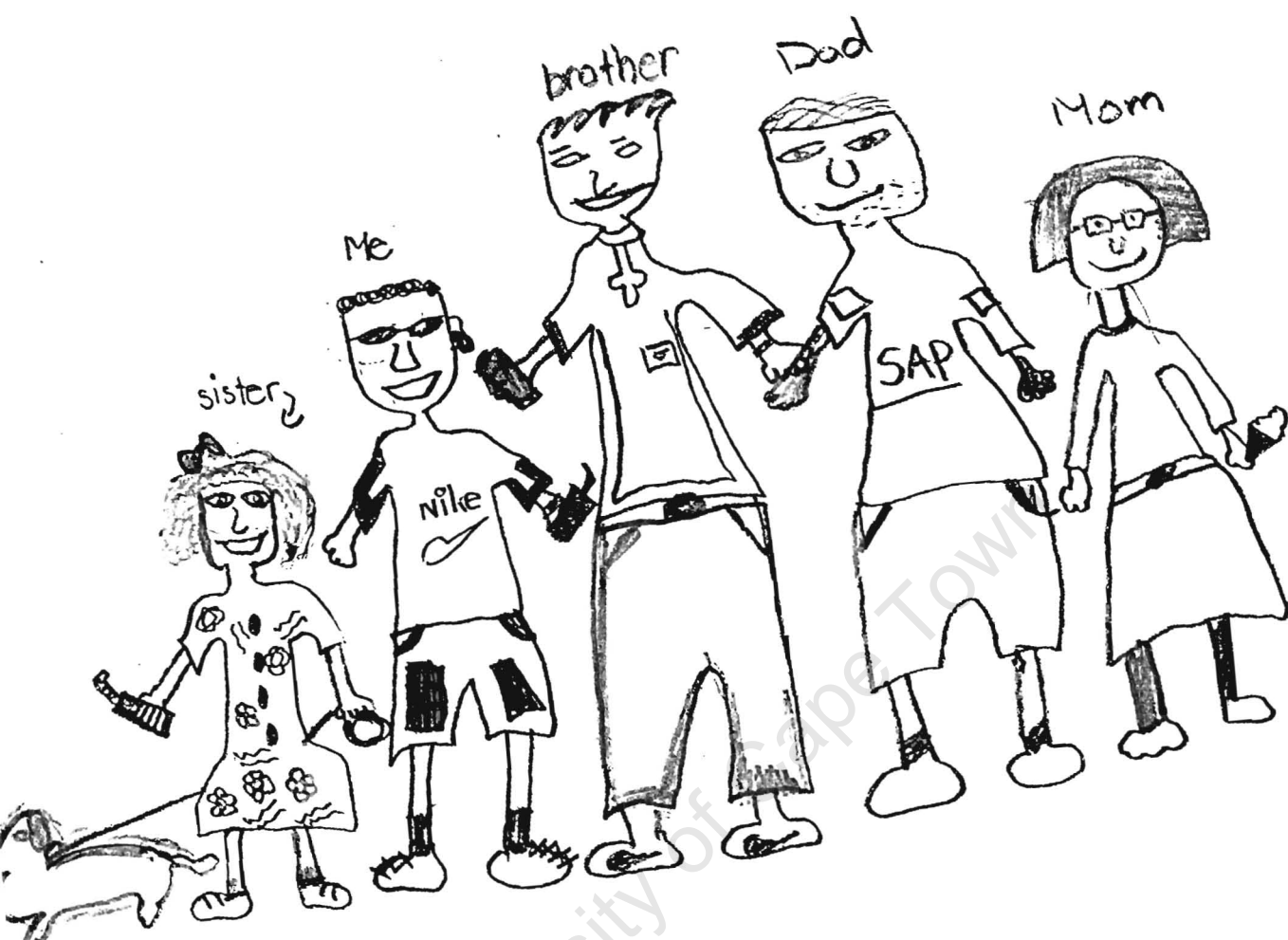
Stuart!

McCaroline!

Dad!

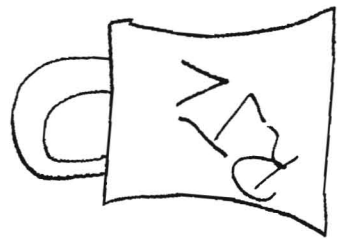
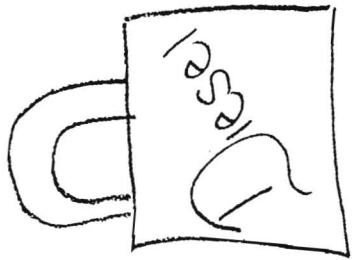
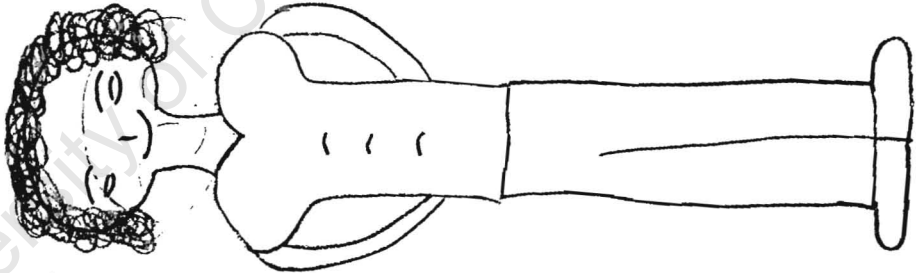
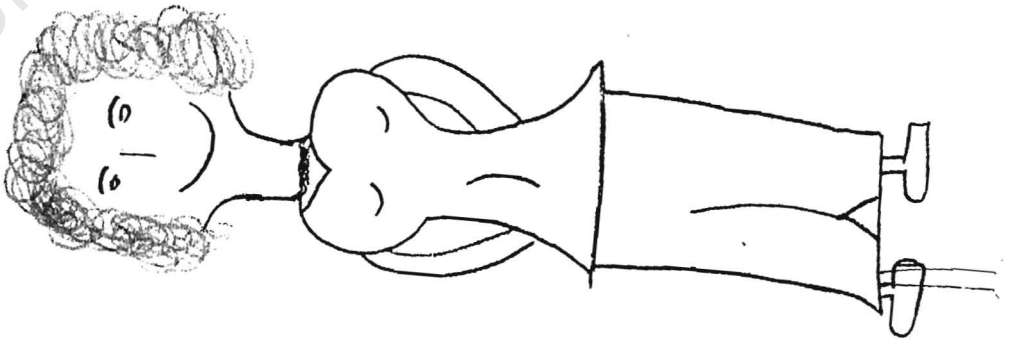






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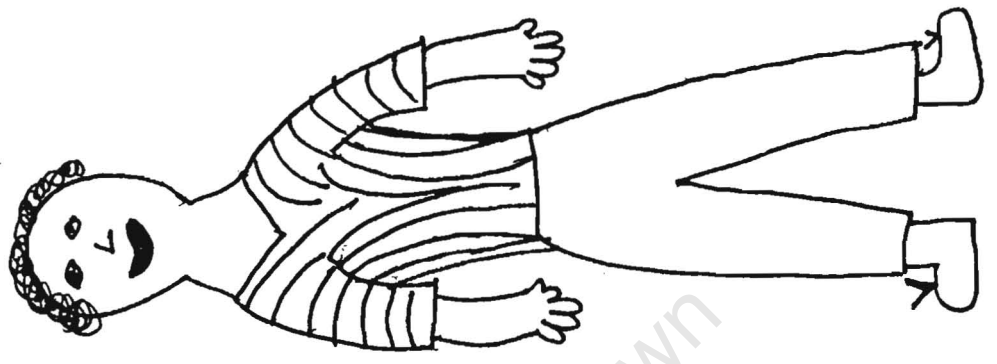
University of Cape Town



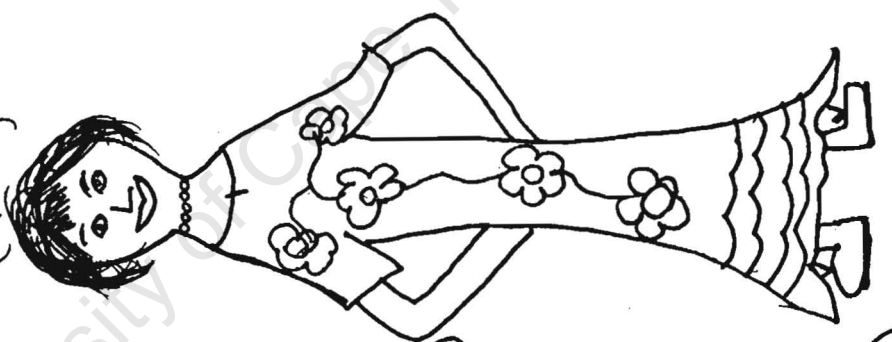
* The Ferreira Family *

Sister
Mom
Dad
2 dogs

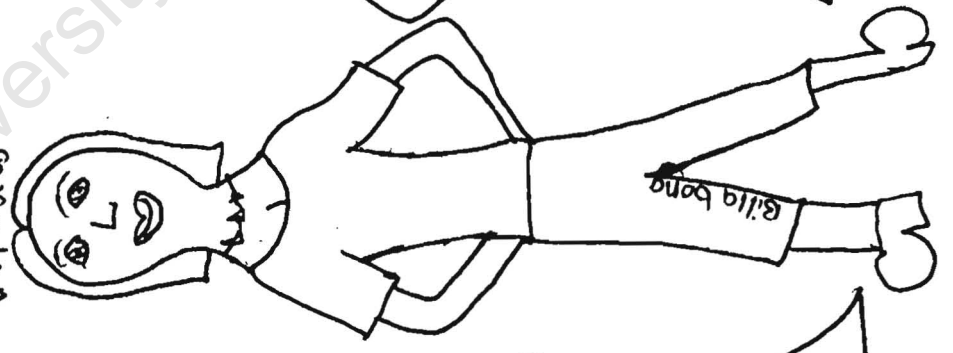
Louis
(my dad)



Cathy
(my mom)



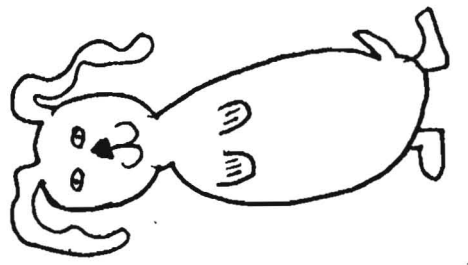
Calli
(my sister)



Ca'Hin
(me)

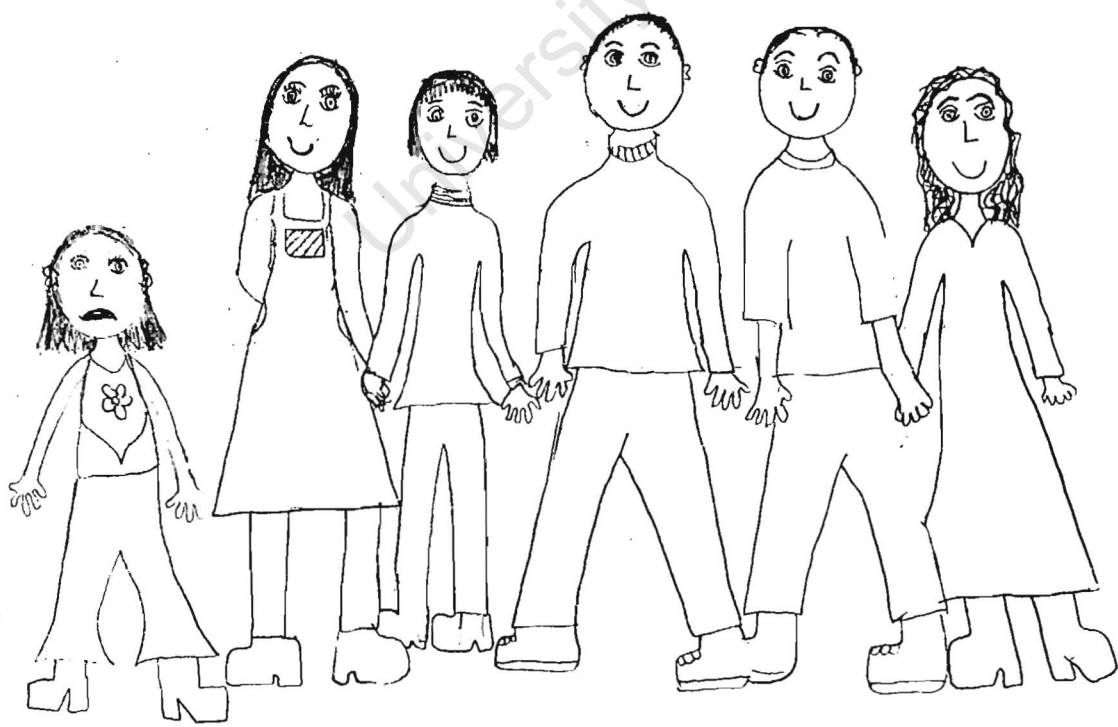


Hunter:
(my dog)



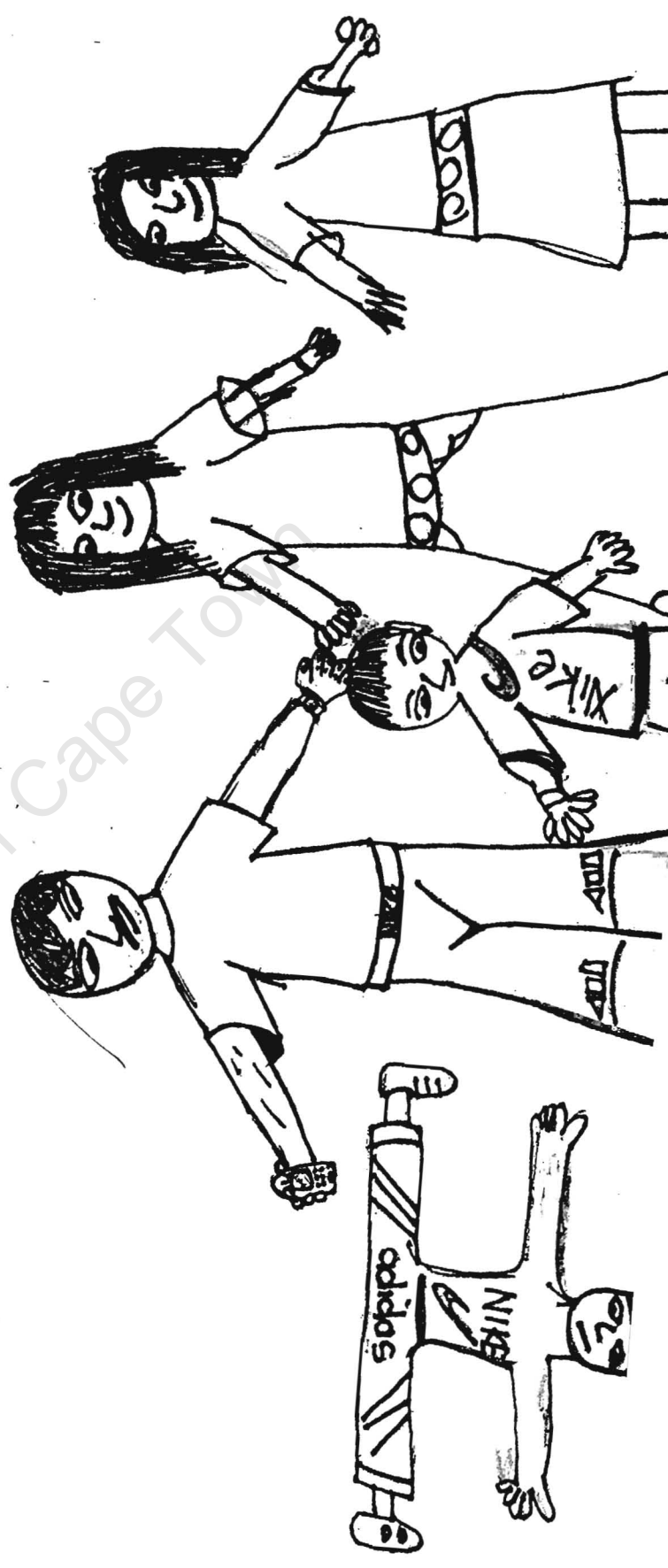
Robo:
(my dog)







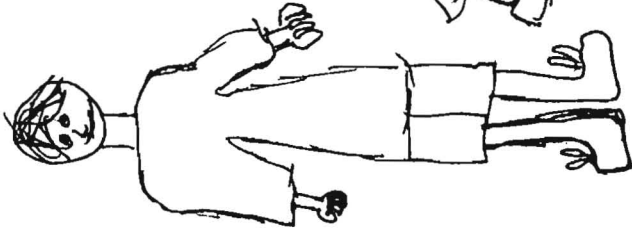
University of Cape Town



~~12 years~~



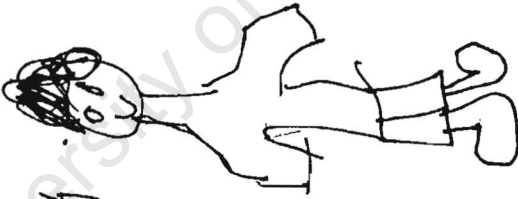
BROTHER



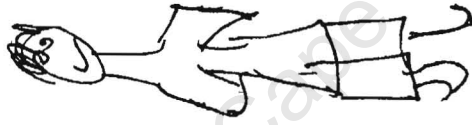
MOM



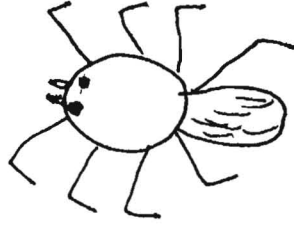
DAD



ME



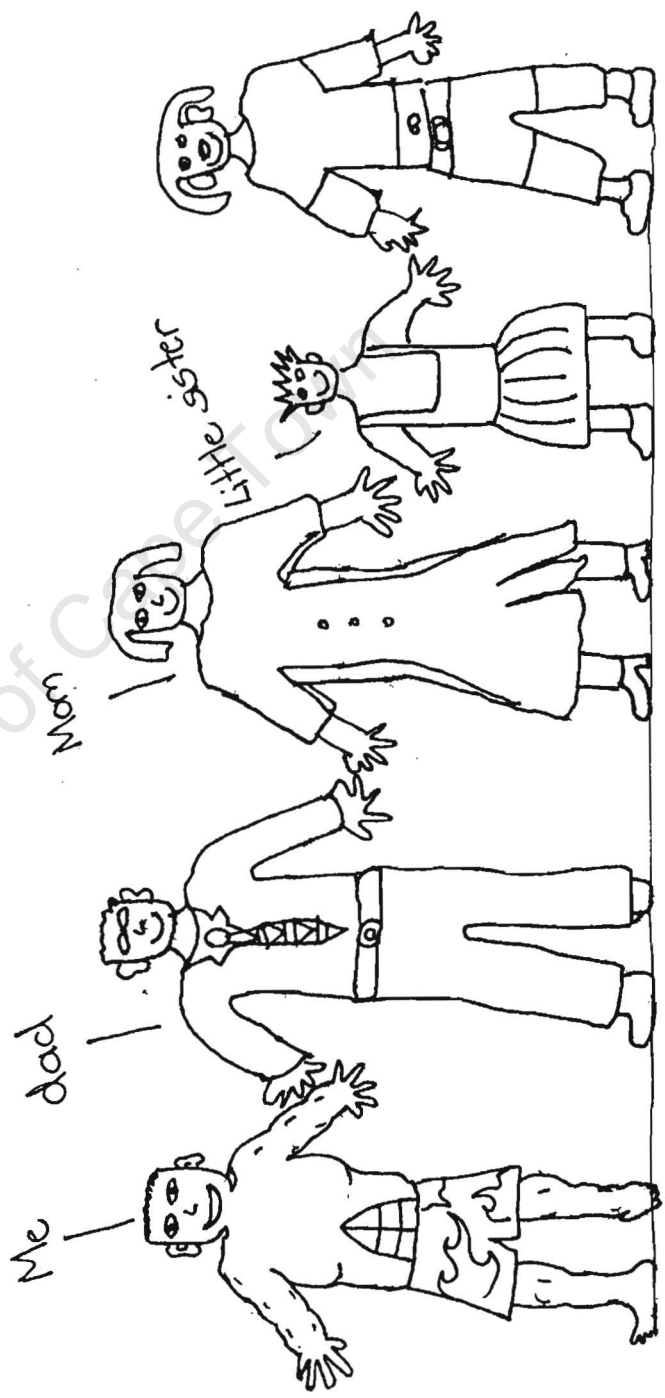
My spider



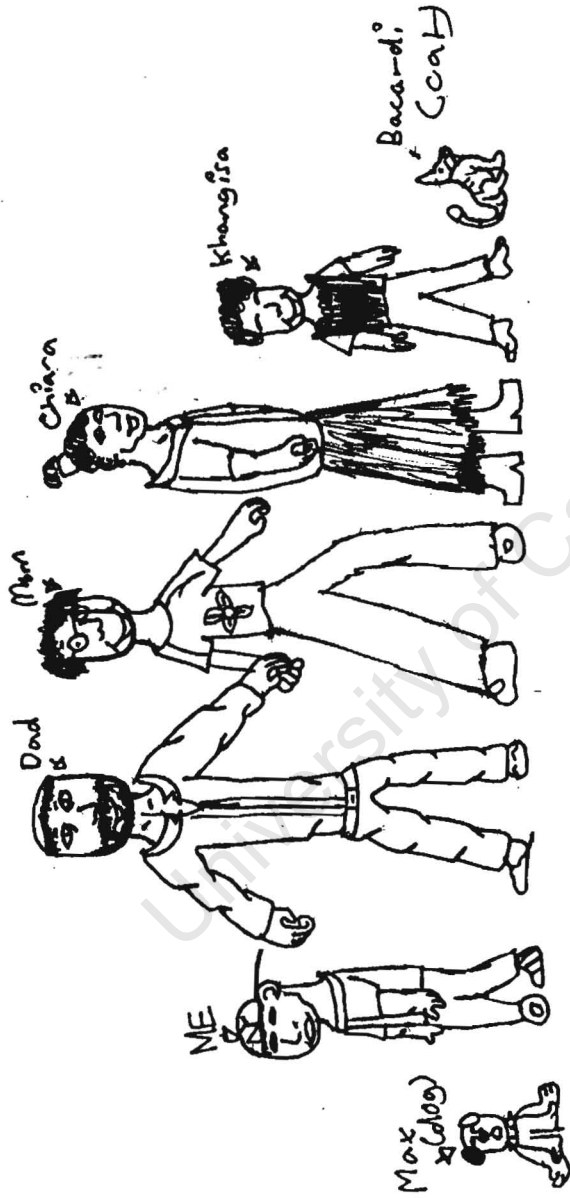
my dog



12 years old

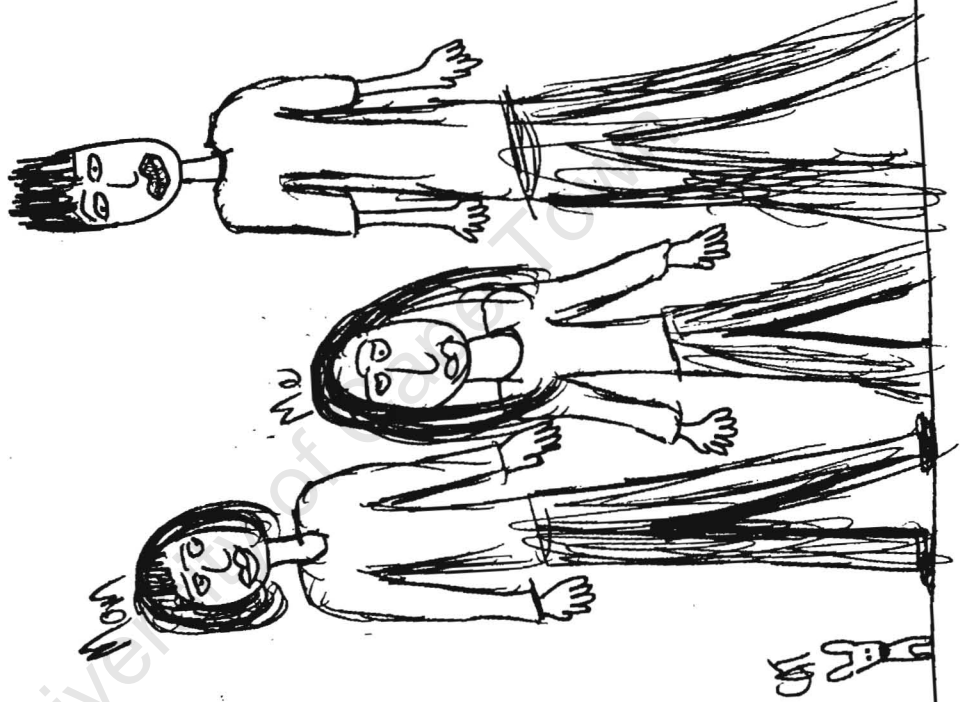


MY FAMILY

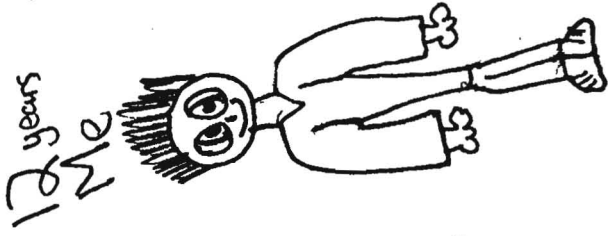
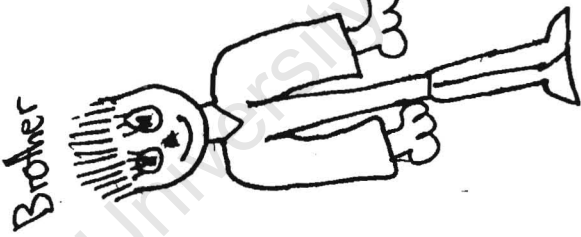
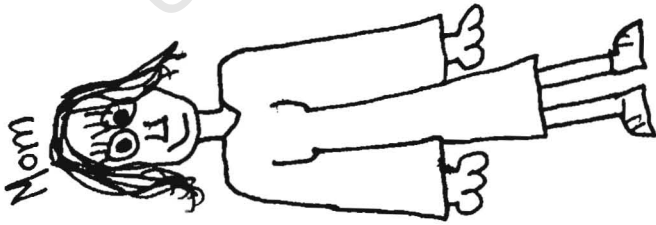
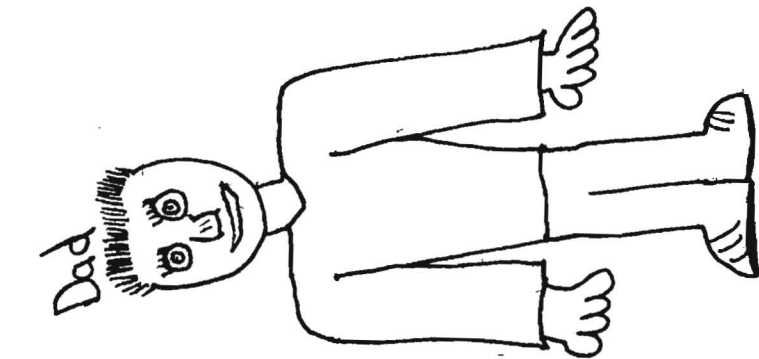


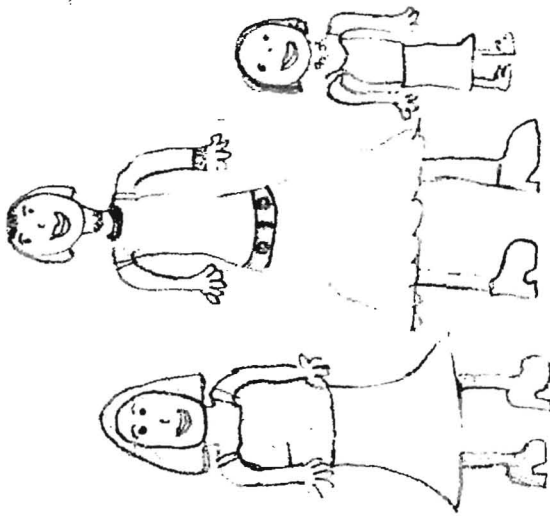
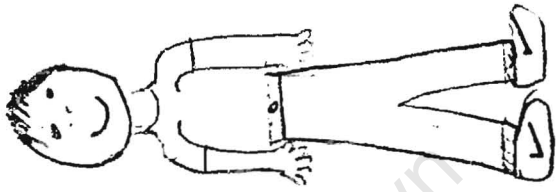
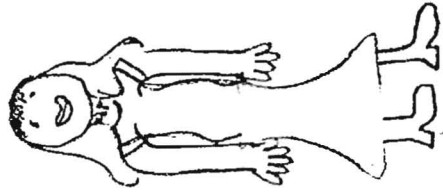
12yrs old

Nicholas Youngst 12.
DAD



Wylie's





University of Cape Town

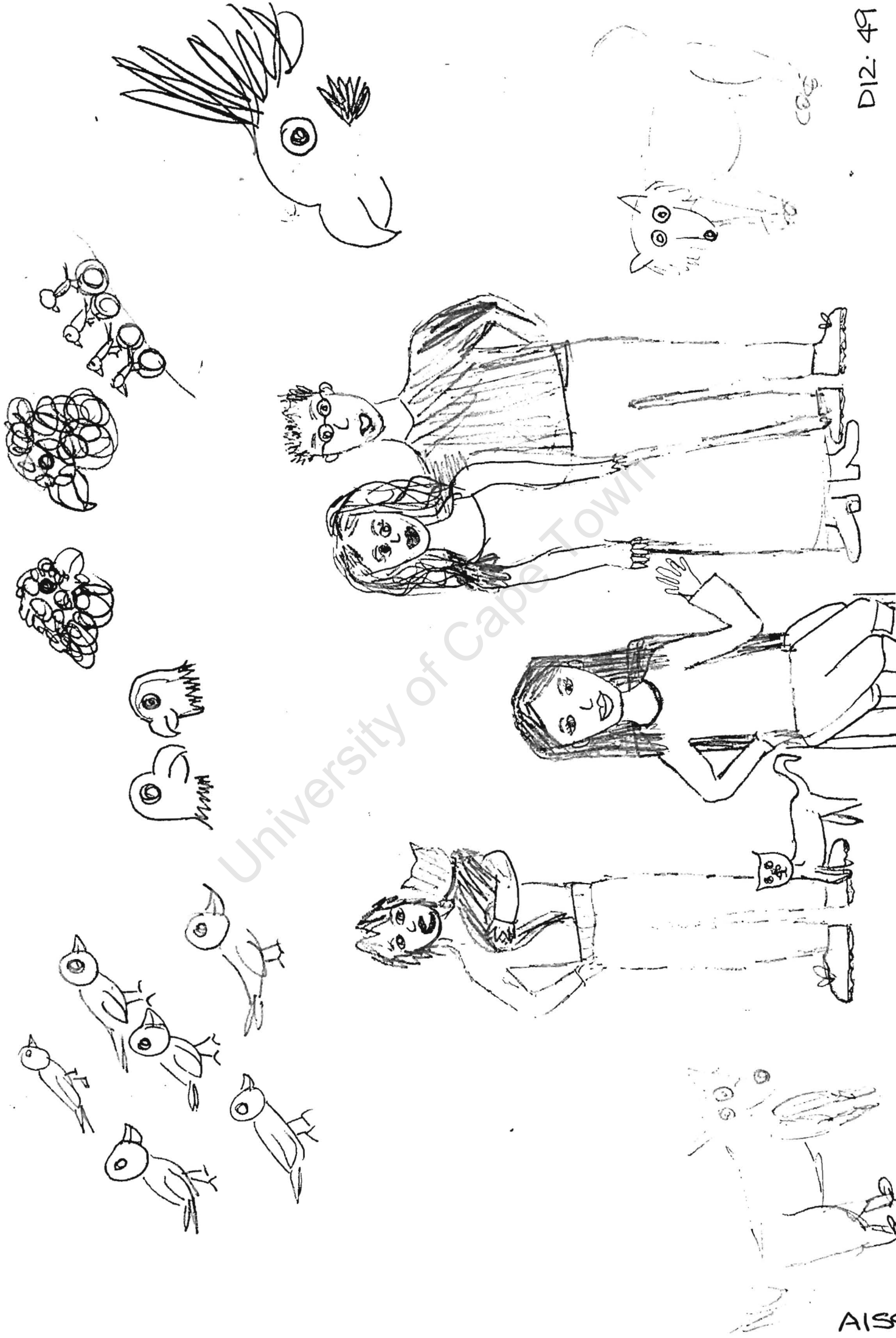
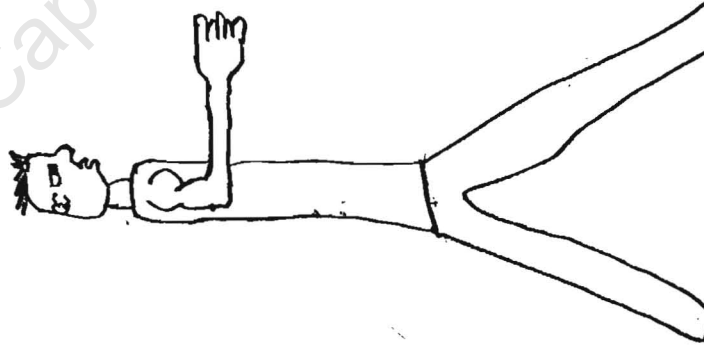
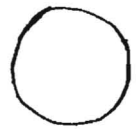
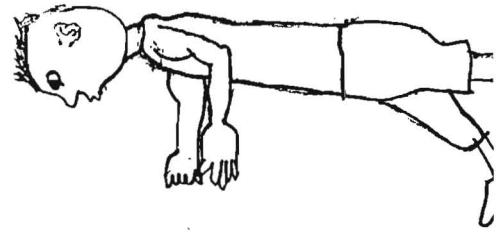
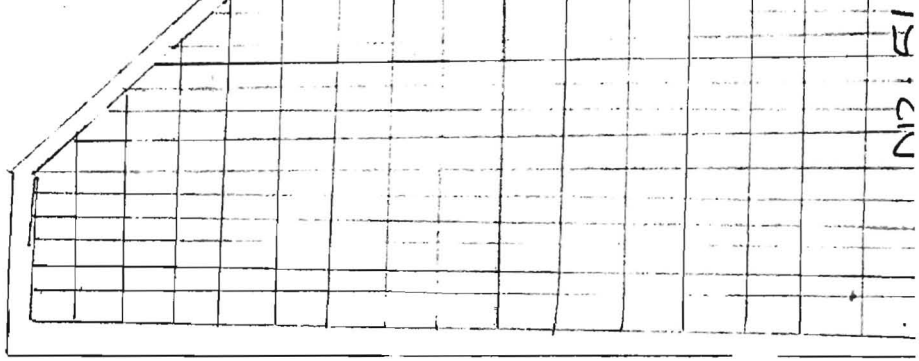
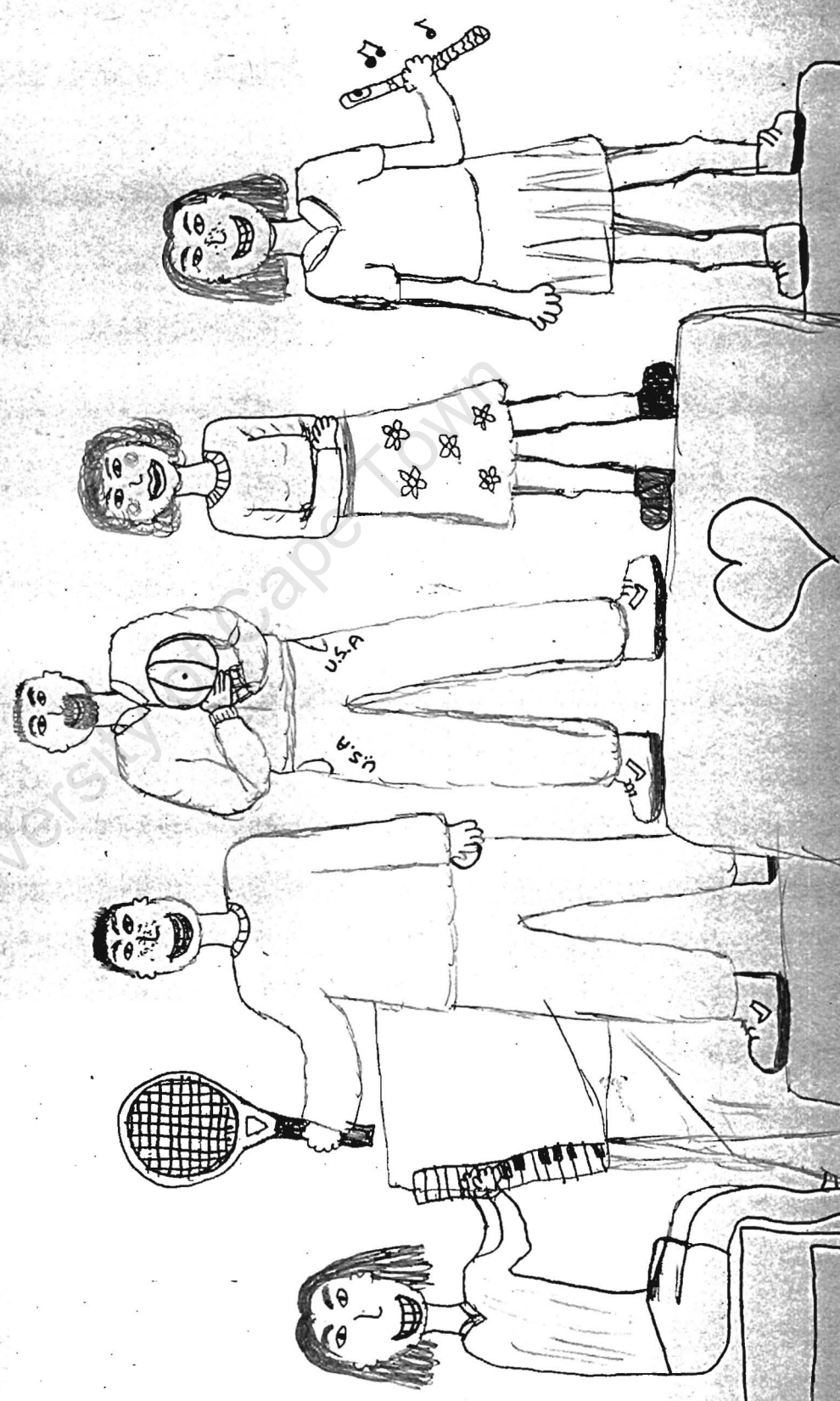


Fig. 12 years old



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A160



OXFORD
AICI

My Family

12 years old



MOM

DAD

DAVID

BIBS

FATTY/SKYE

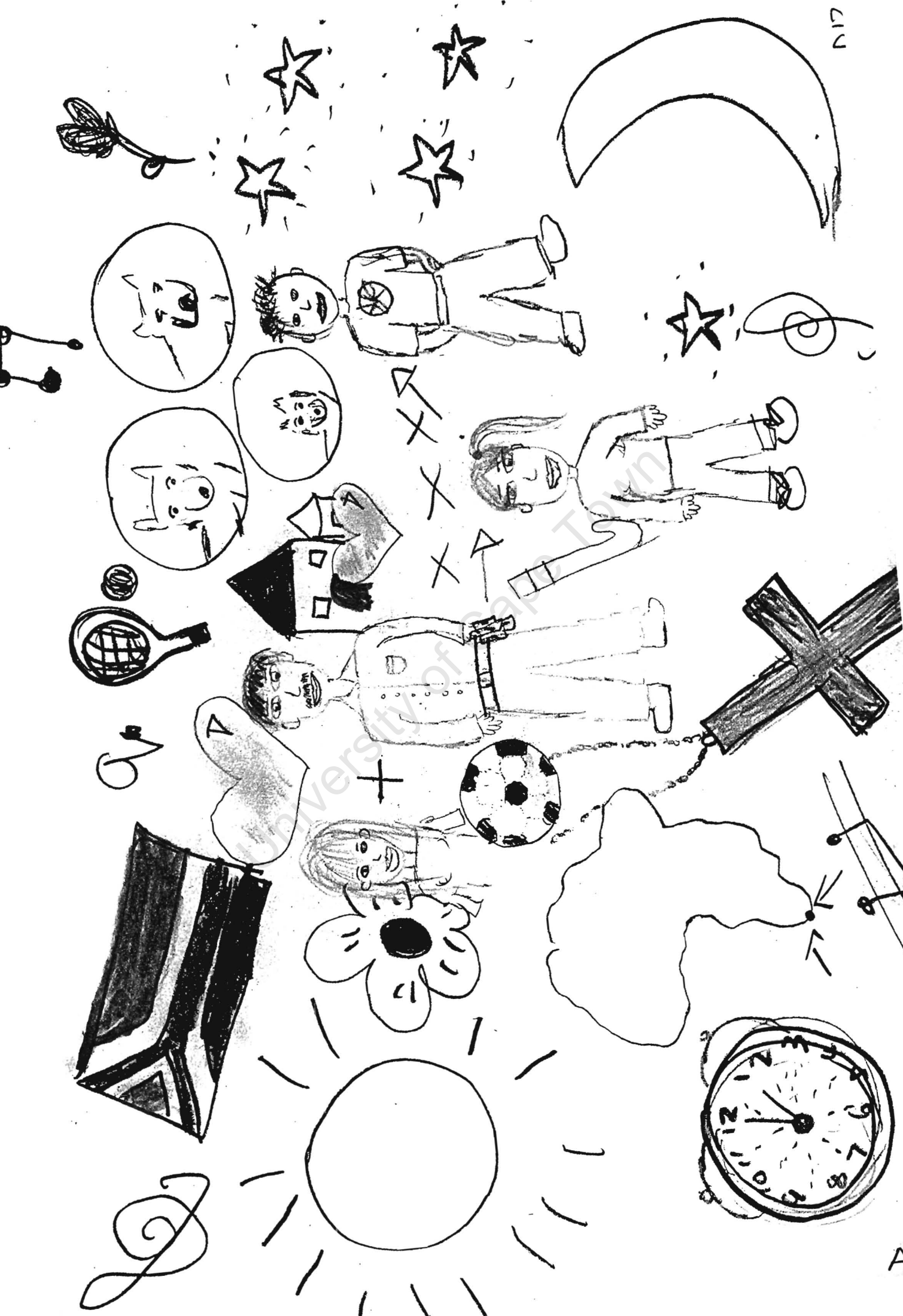
BONNIE

JESSE

GO AWAY

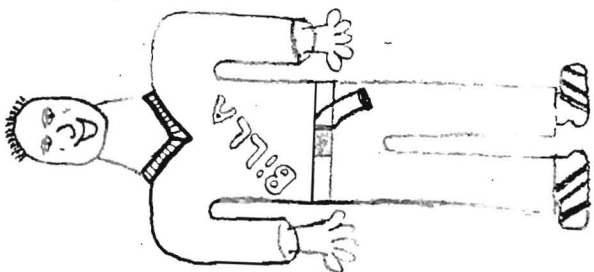
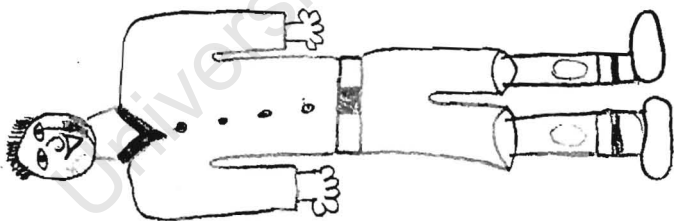
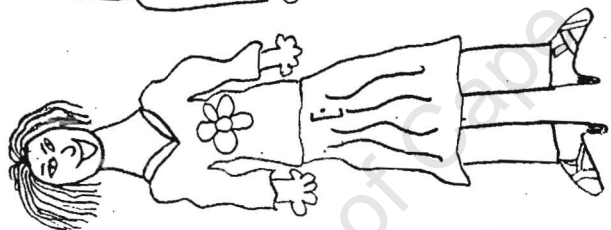
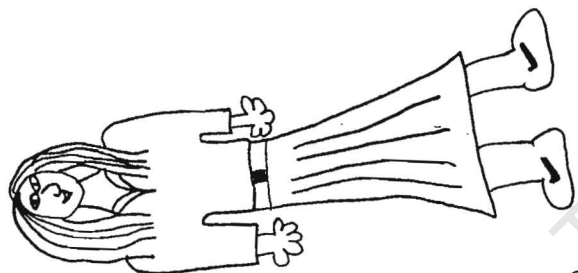
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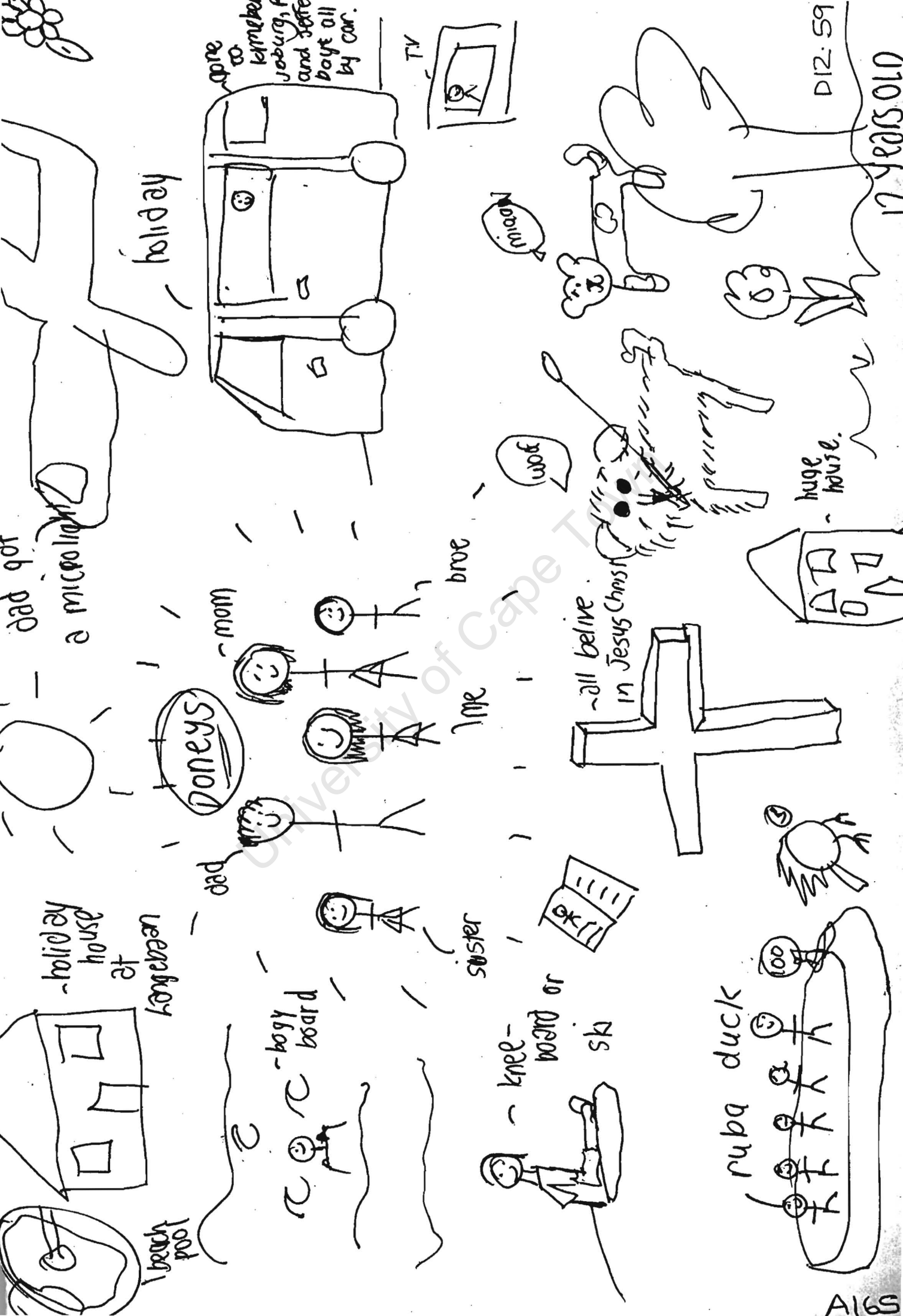
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117

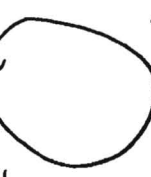
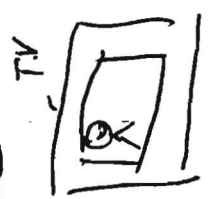
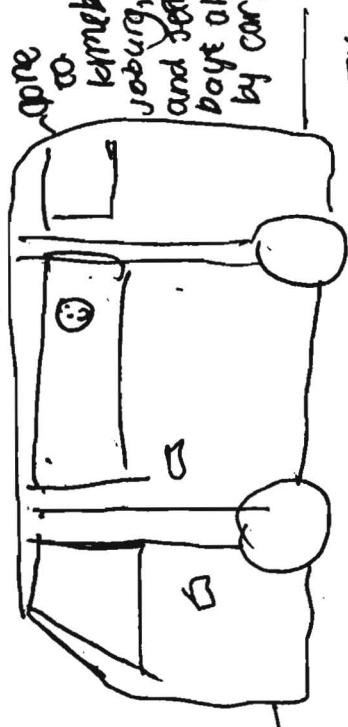
A



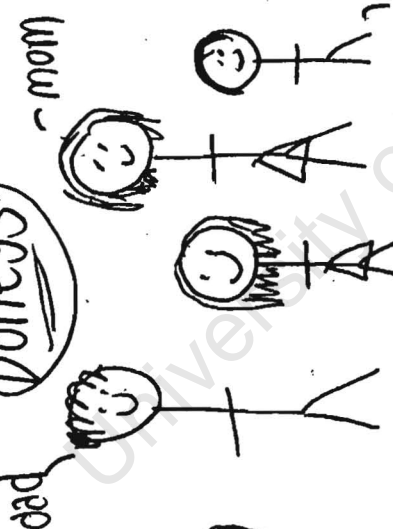


dad got a microphone

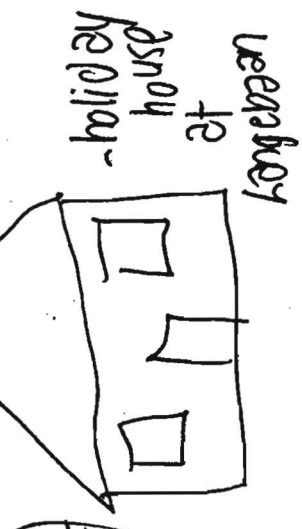
holiday



Doneys



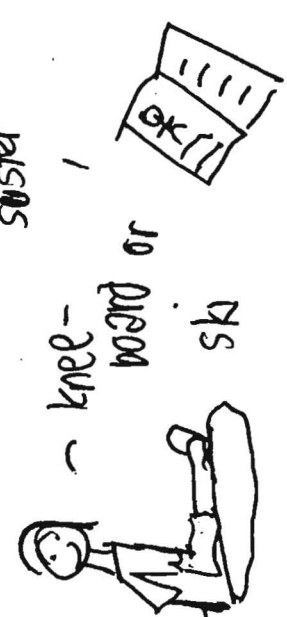
me broe



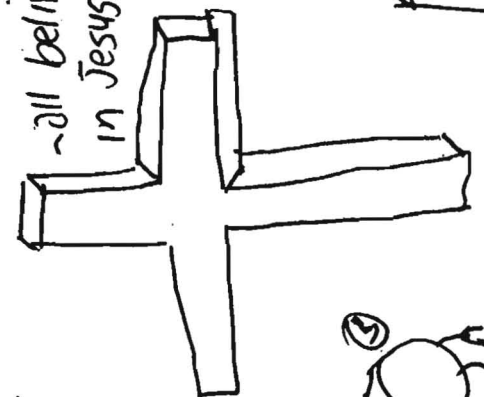
-bogy board



suster



-all believe in Jesus Christ

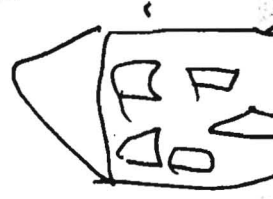


miaou

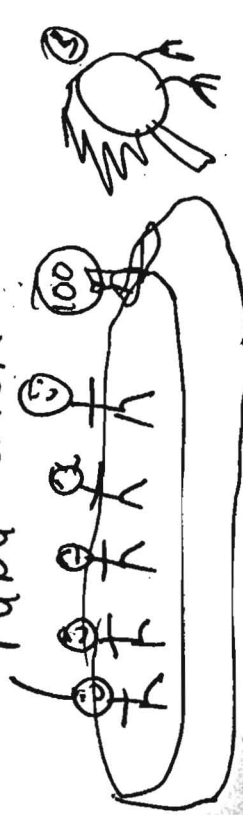
wof



huge house.



ruba duck



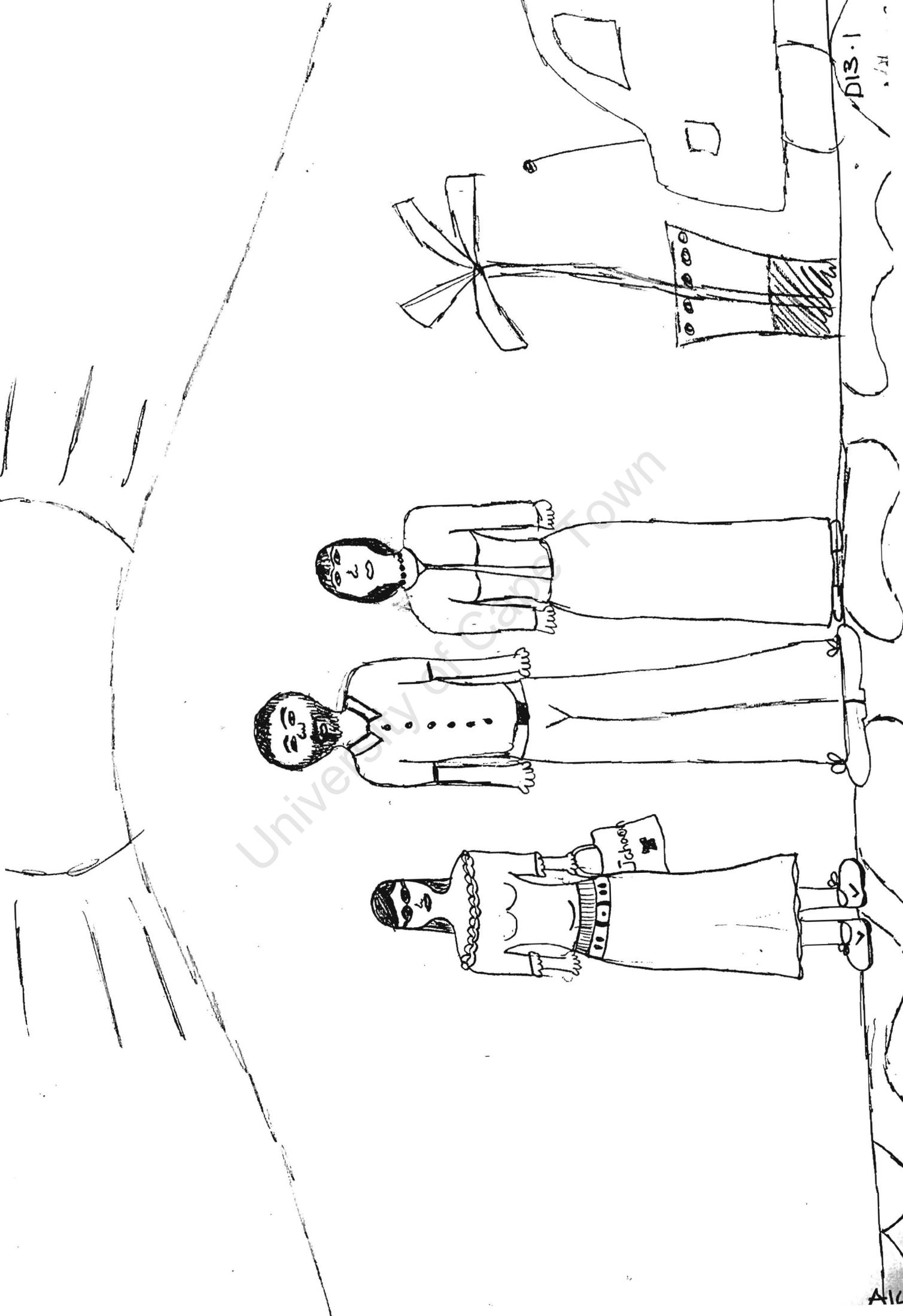
D12-59

17 years old

A165

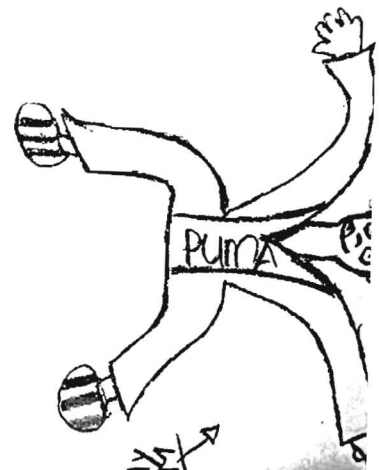
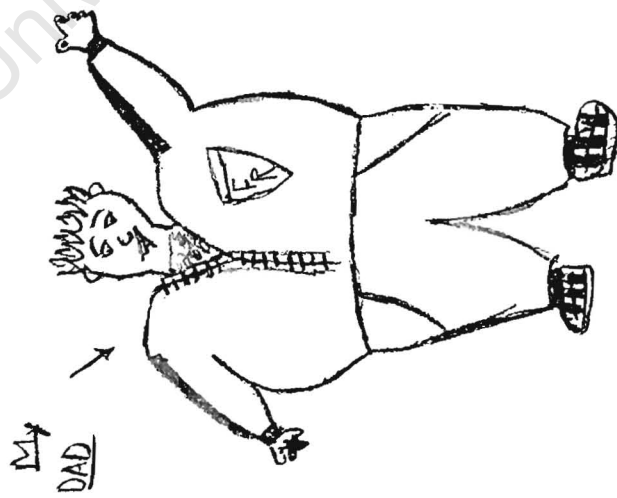
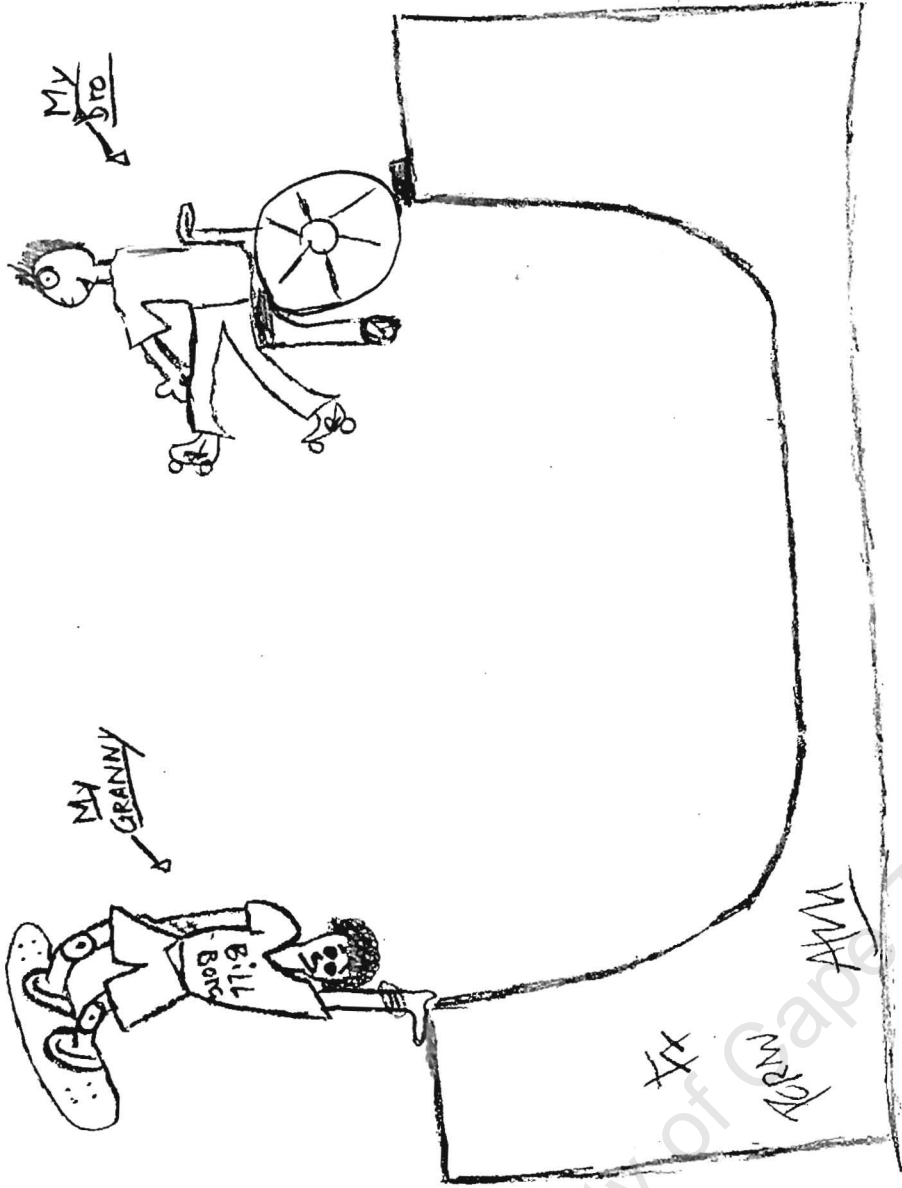
THE THIRTEEN-YEAR-OLD DRAWINGS

University of Cape Town

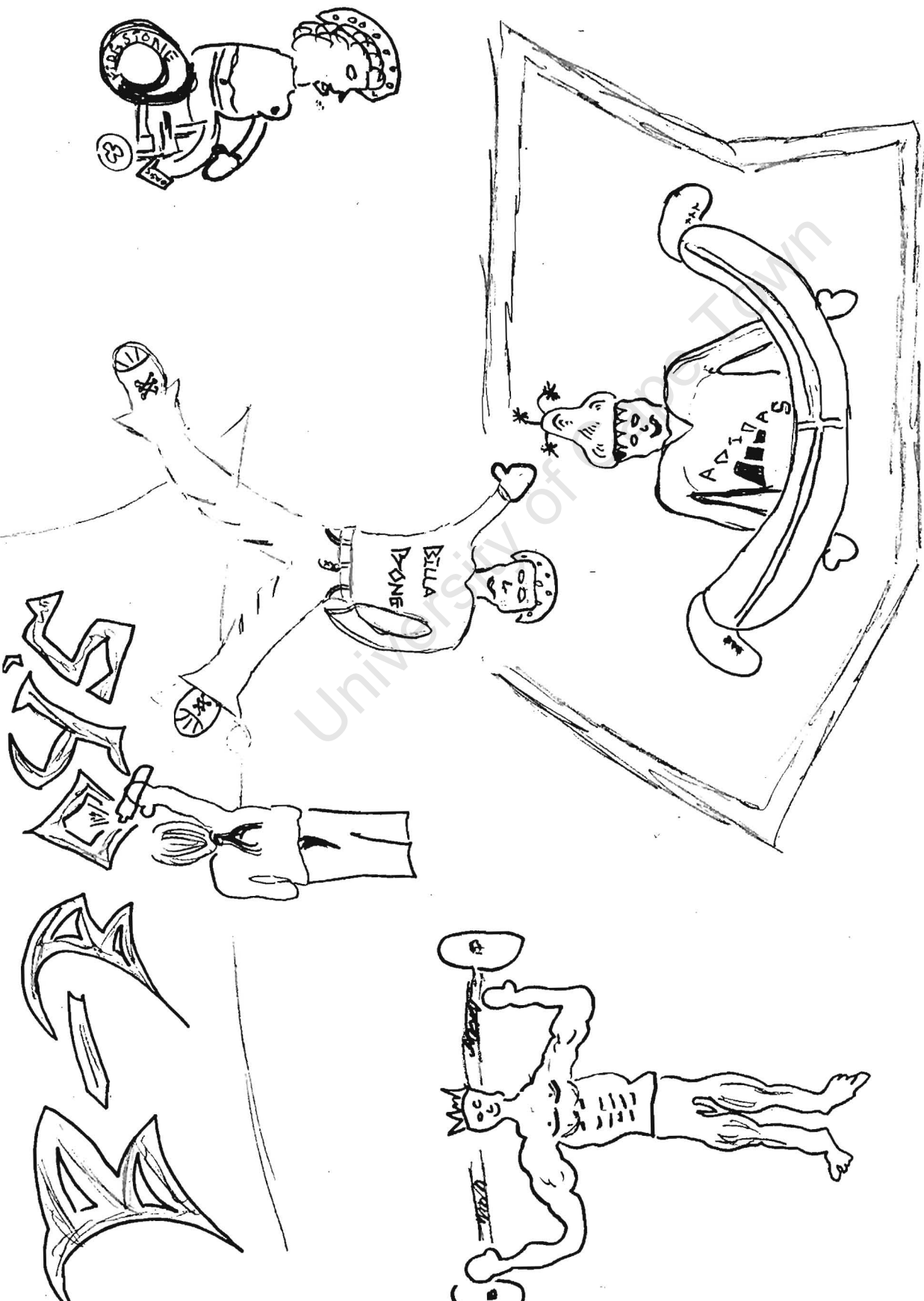


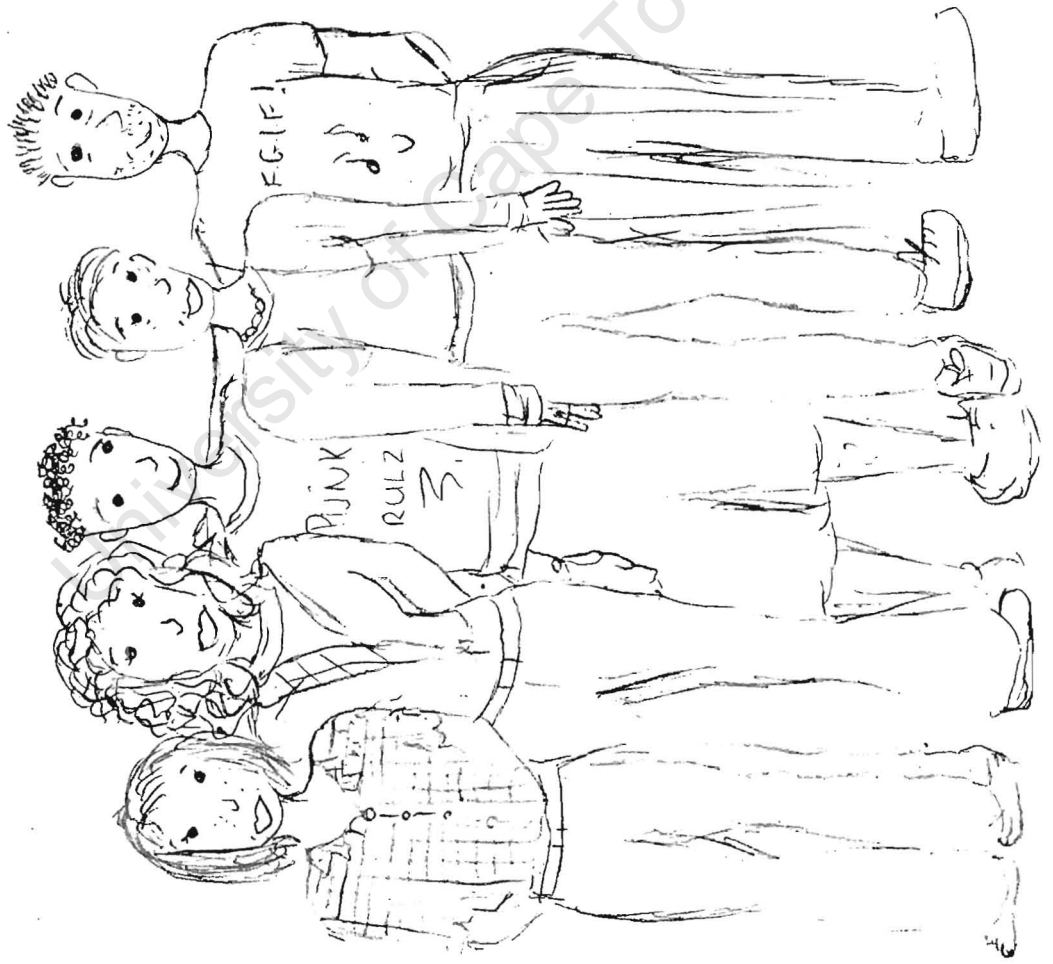
University of Cambridge

By Jamil



University of Cape Town





Dad
(Tnemba)



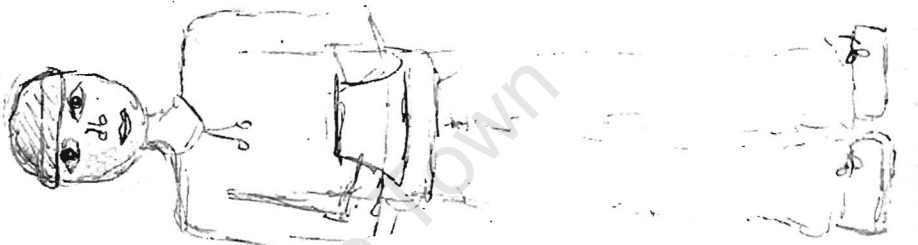
Mum
(Sprine)



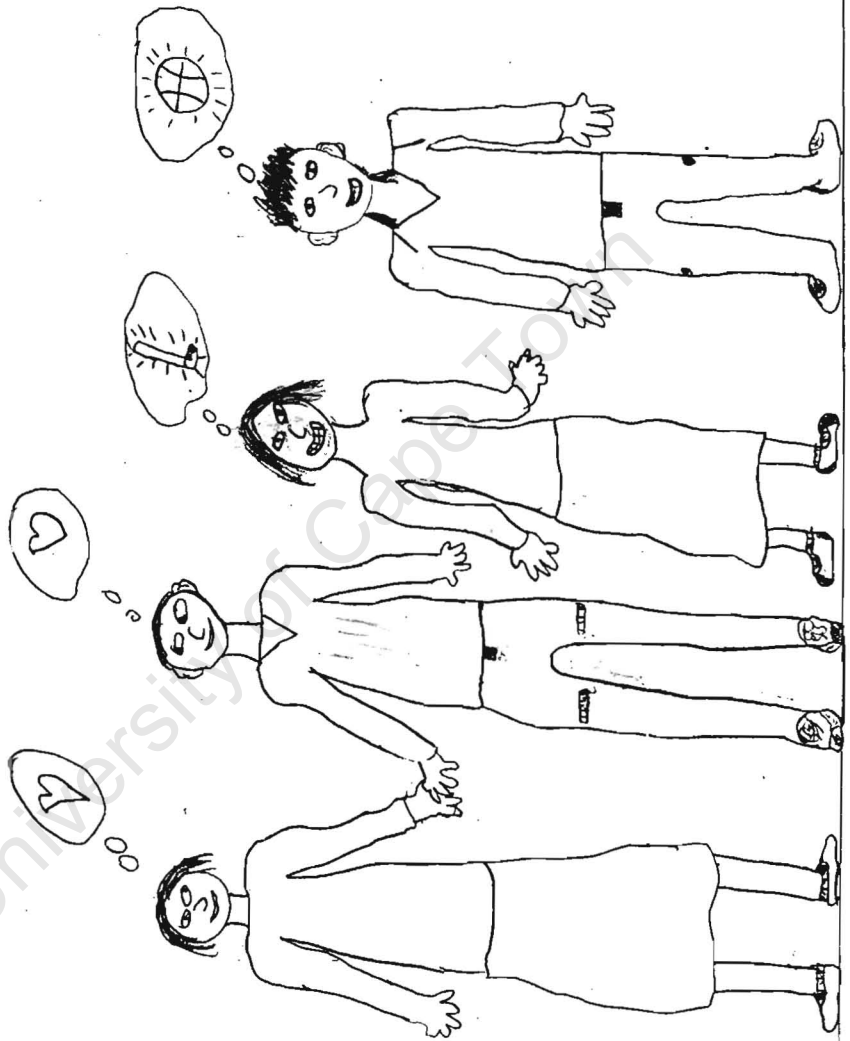
Sister
(Nandi)



Brother
(Thembaezwe)

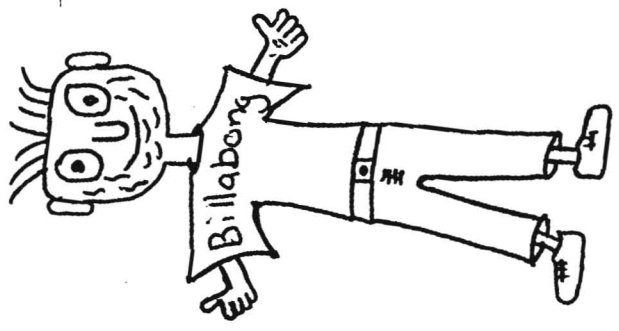


ME!

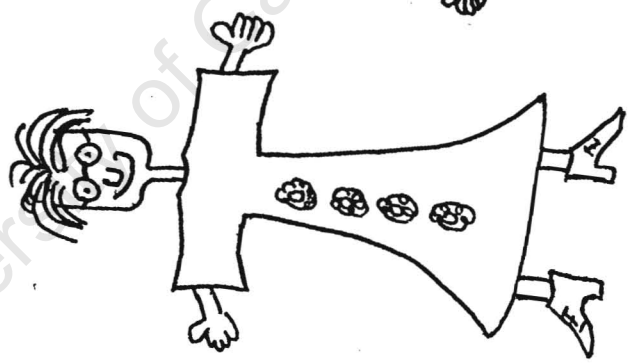


Age: 13 yrs

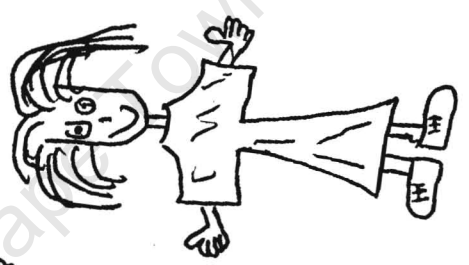
Theo

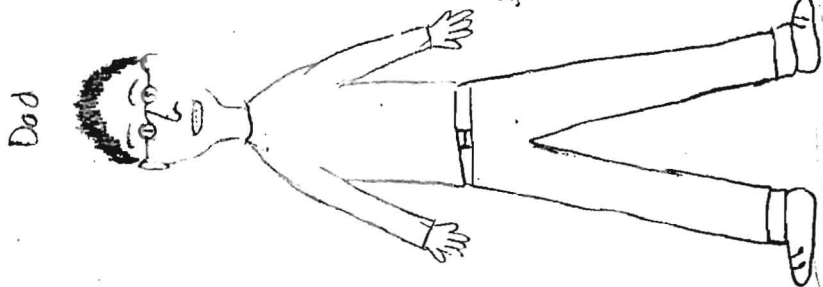
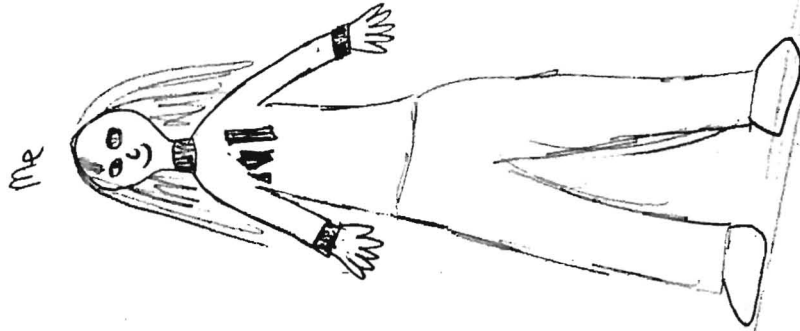
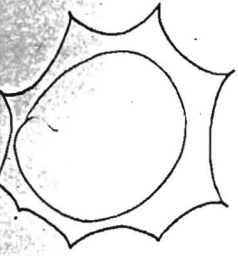


sheila



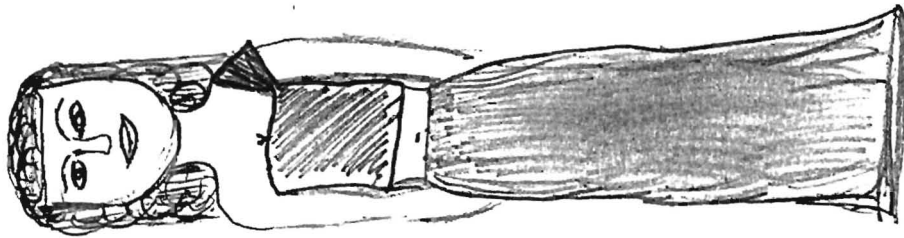
Catherine



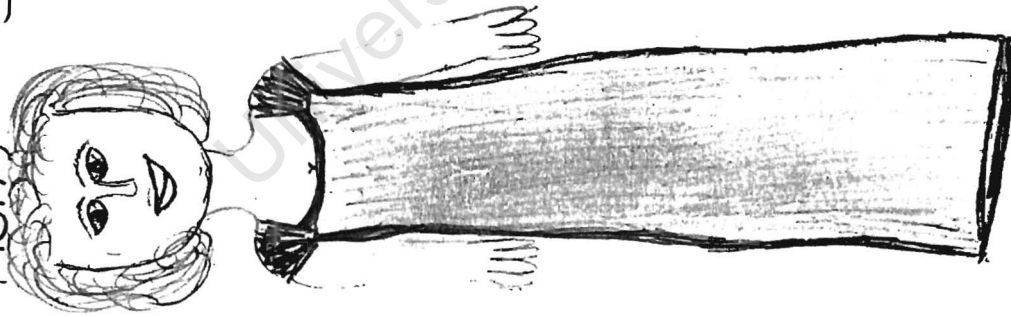


12-13 on September 26.
My Family.

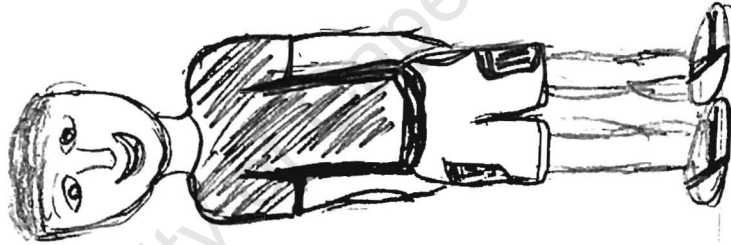
Me



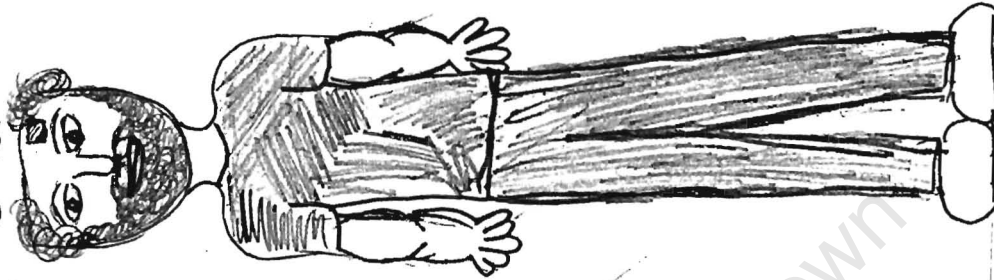
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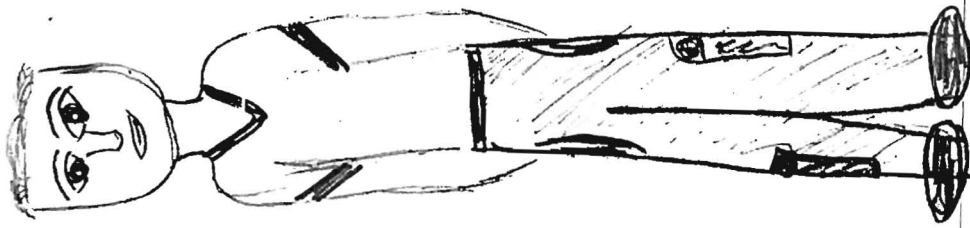
Small brother



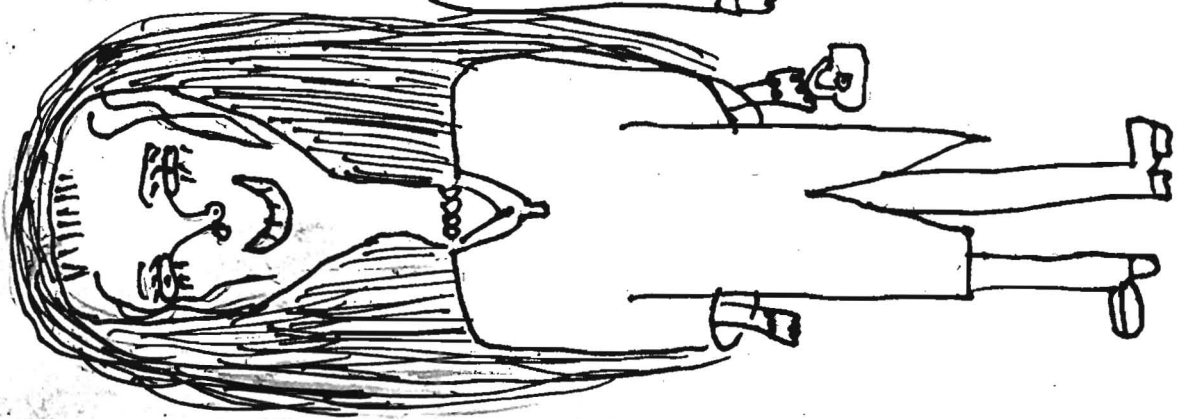
Dad



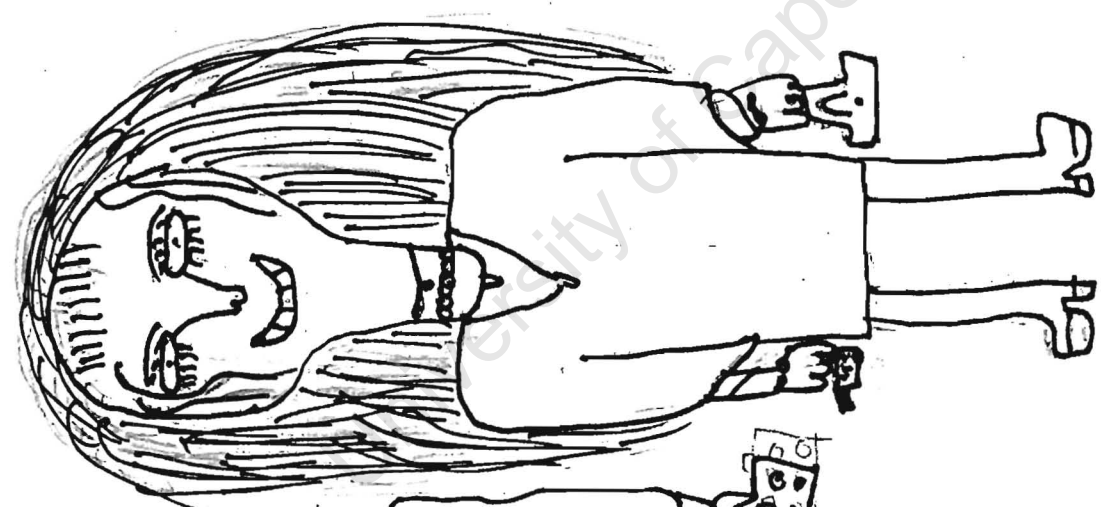
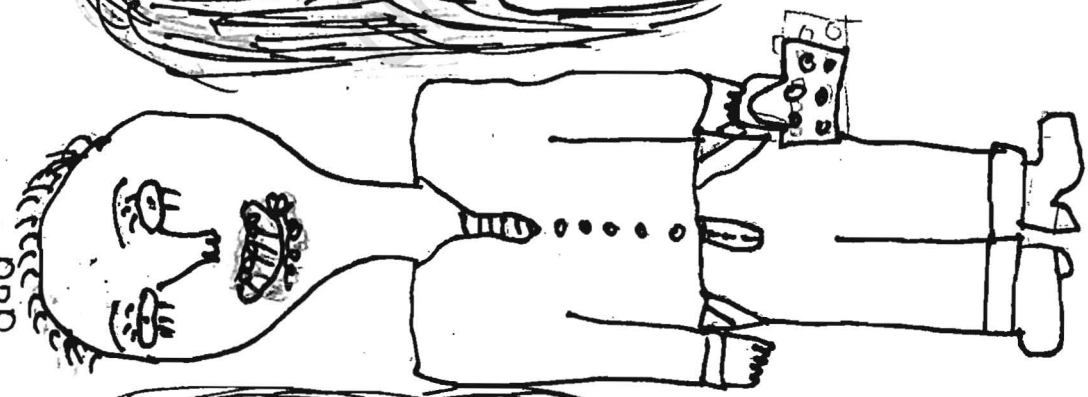
Big brother



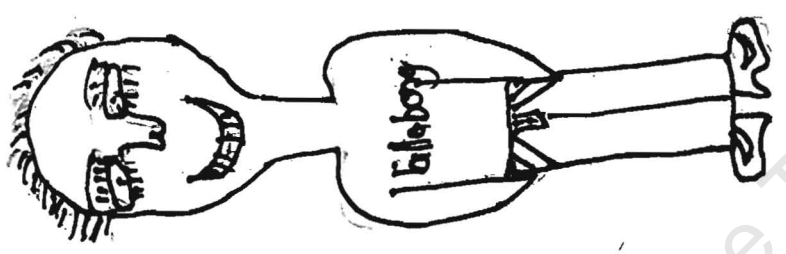




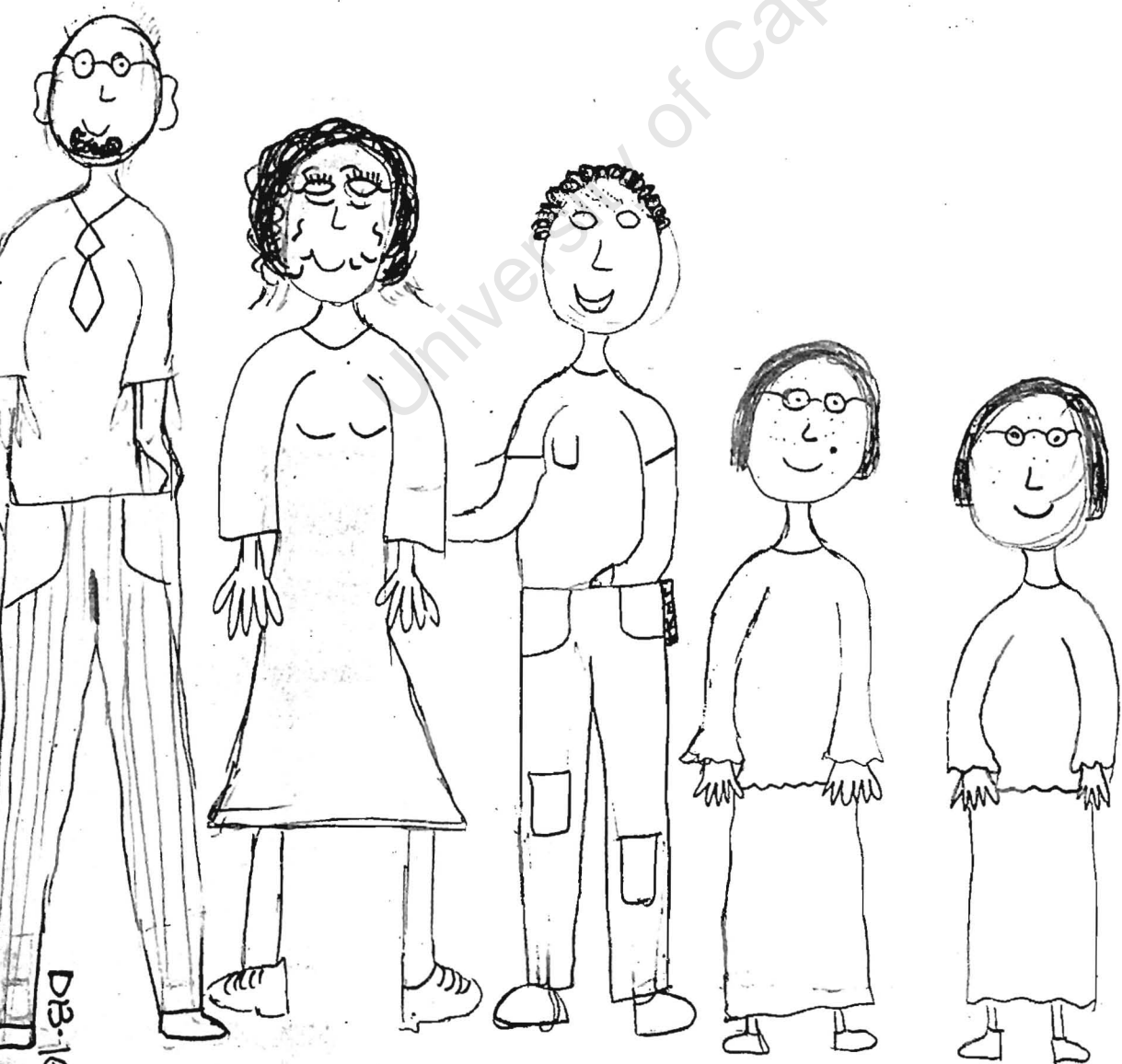
dad



brother



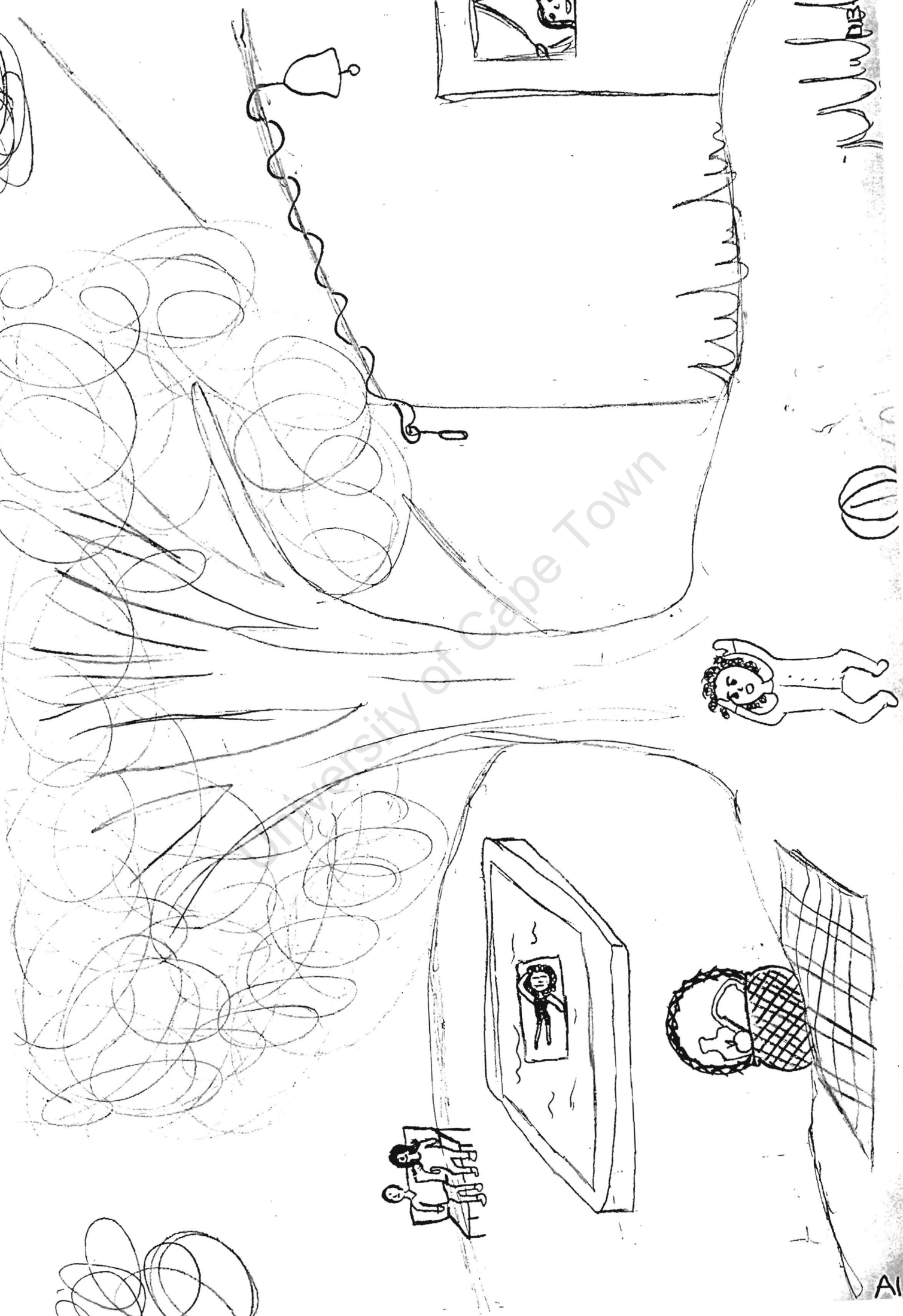
MY FAMILY IIII 060



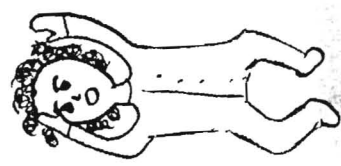
D3-16

year old

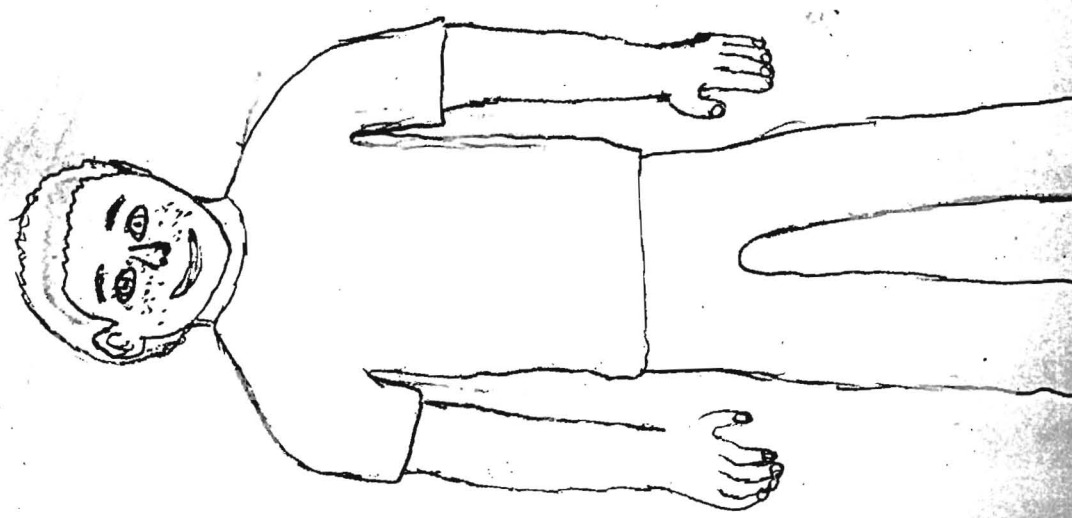
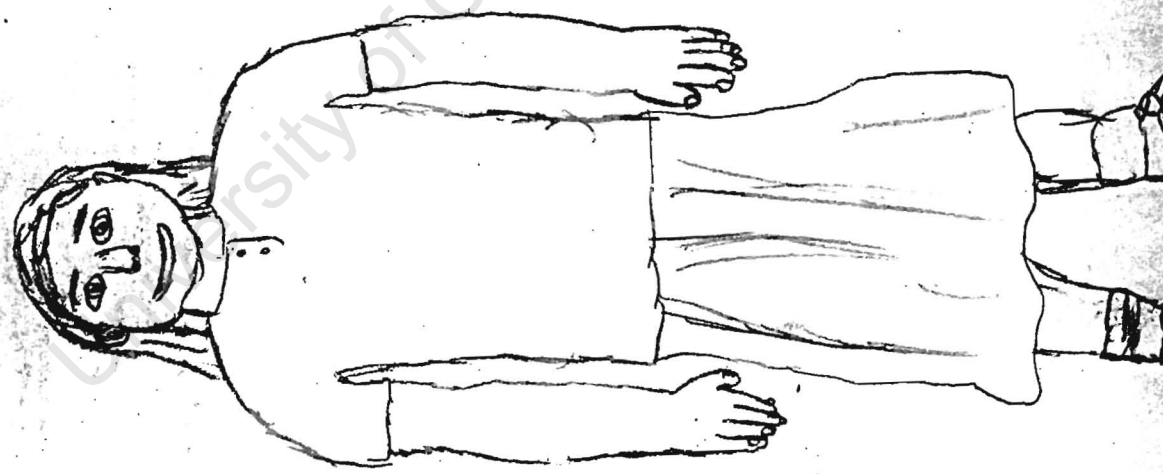
A177



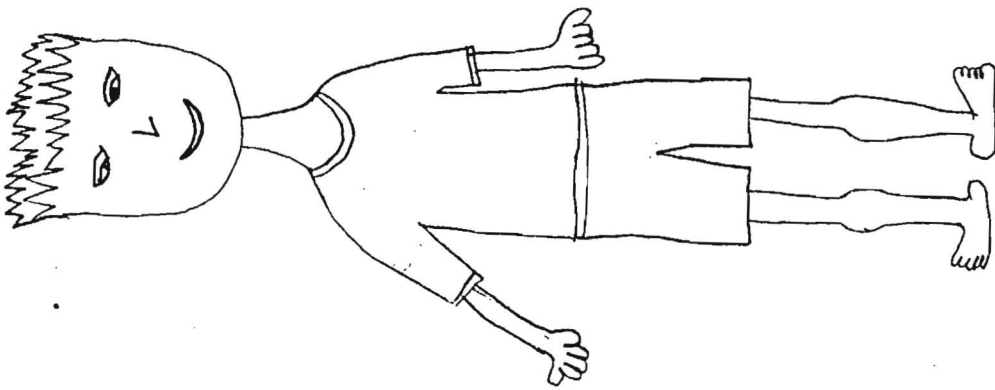
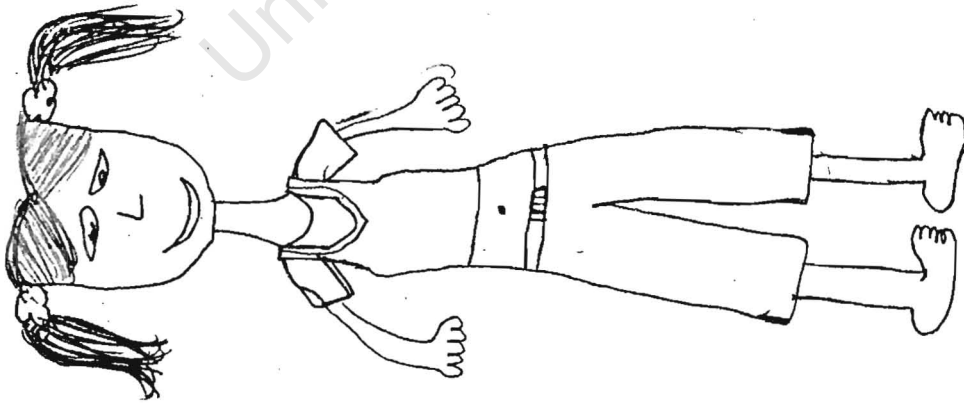
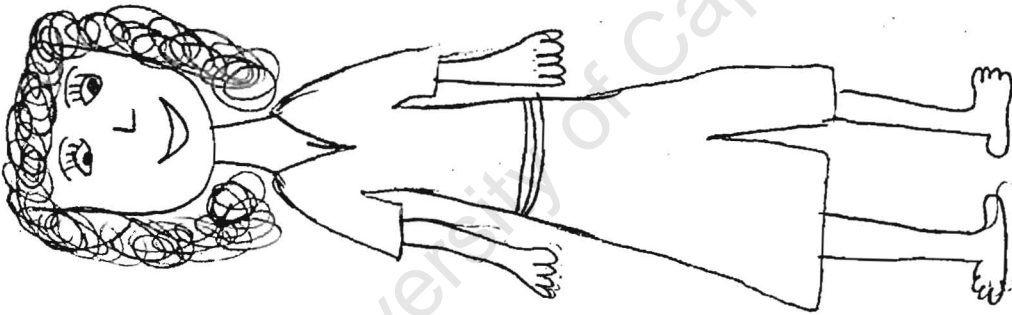
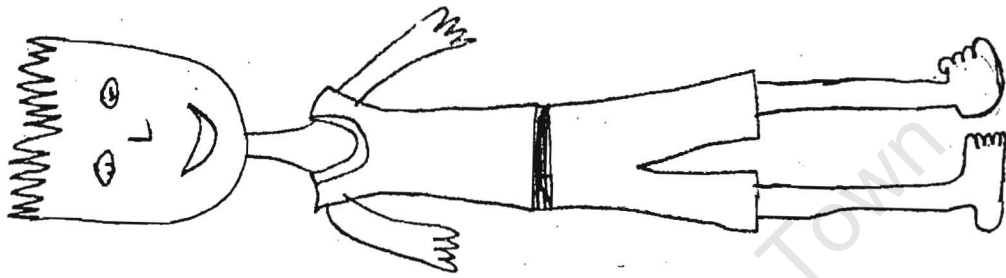
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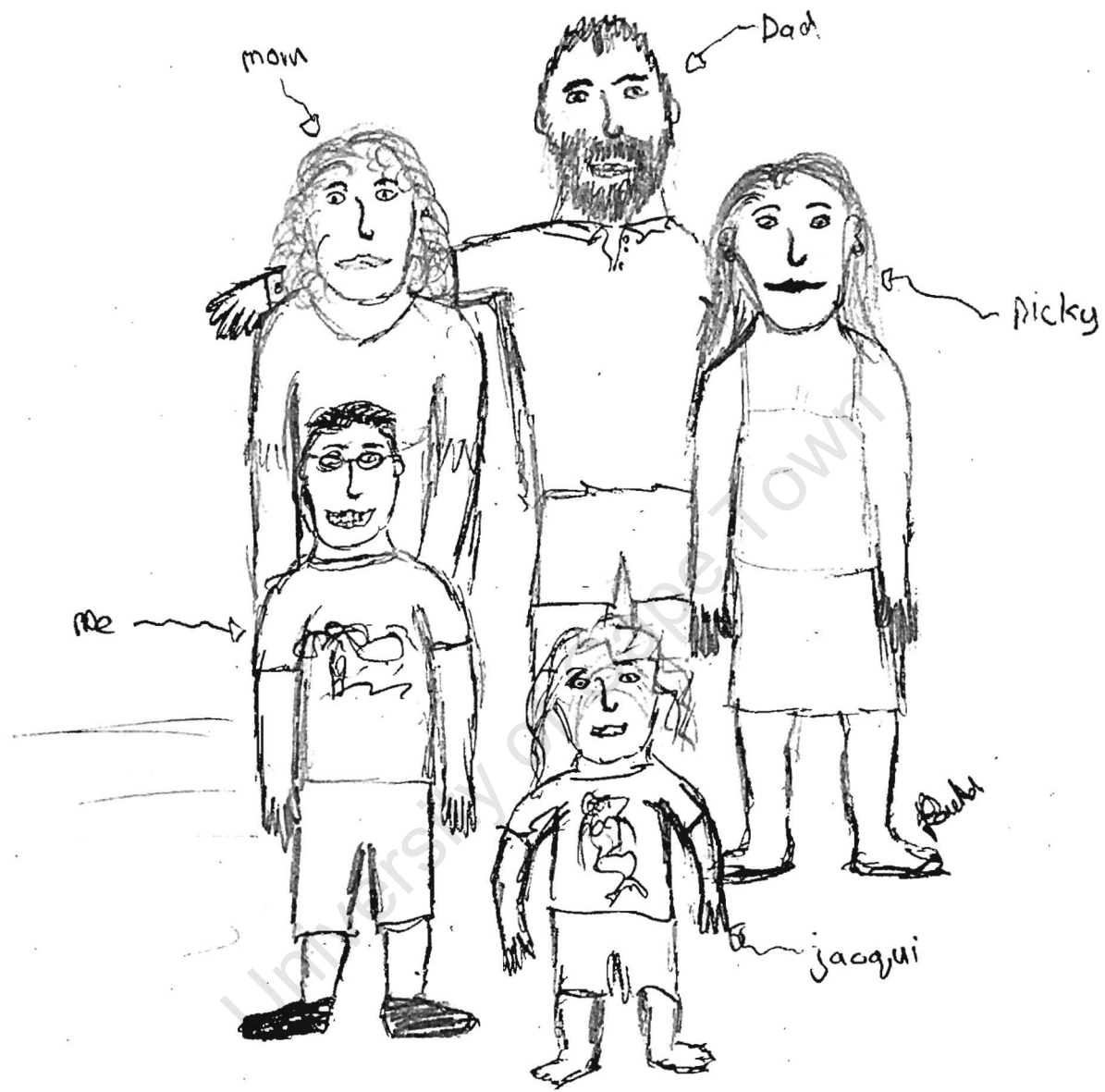
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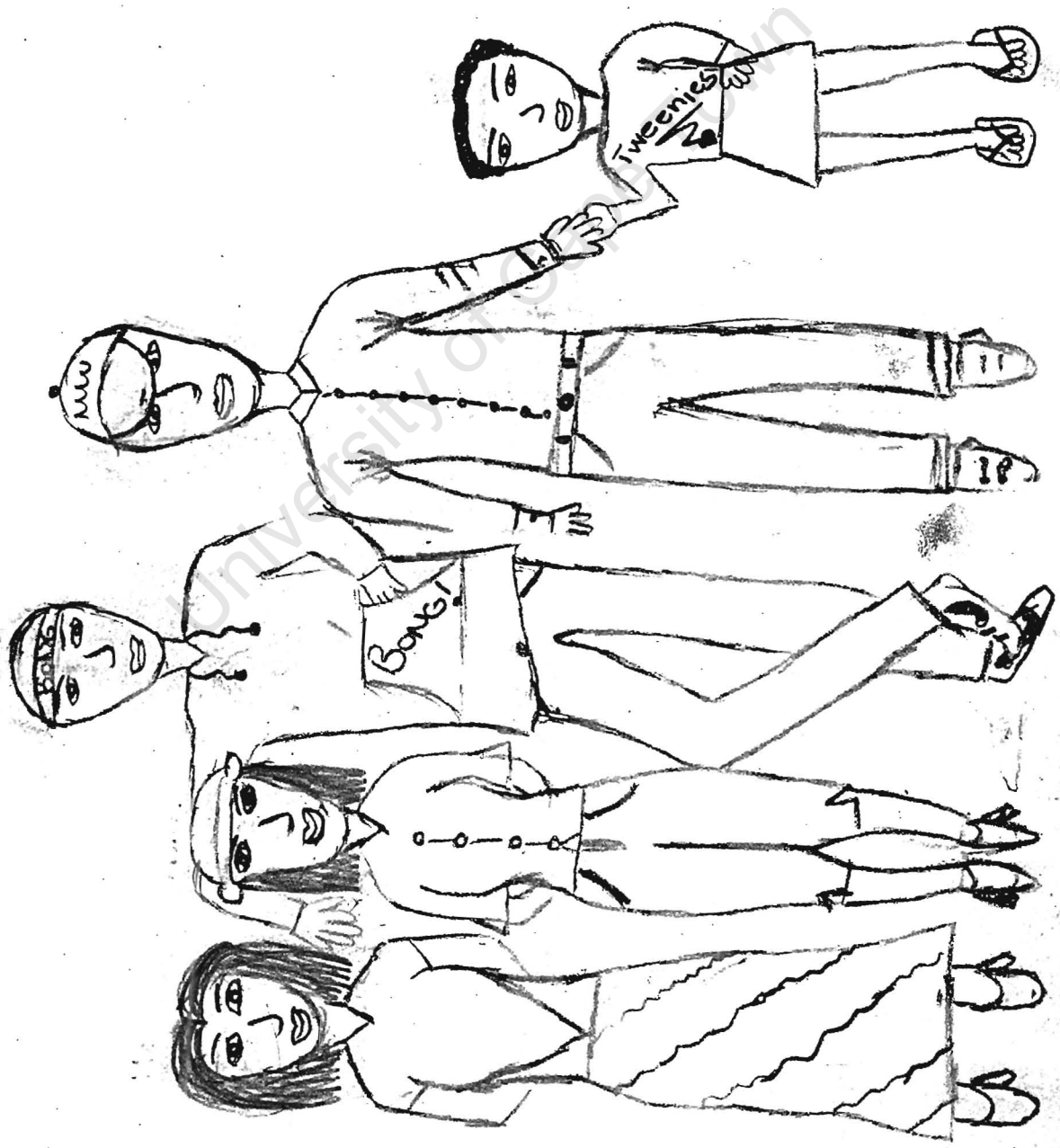
University of Cape Town

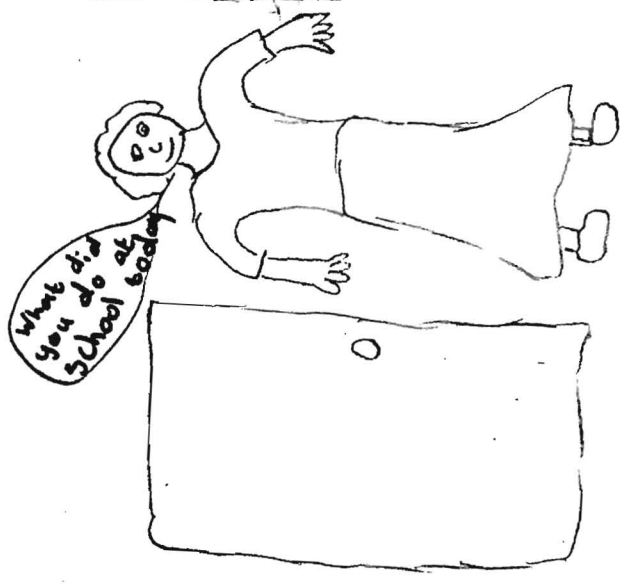
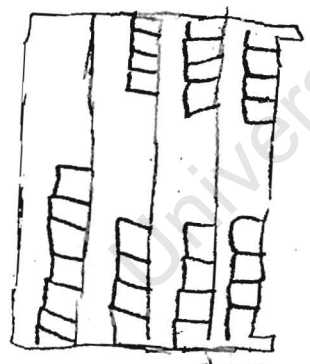
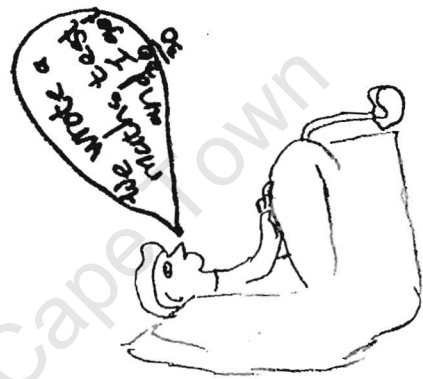
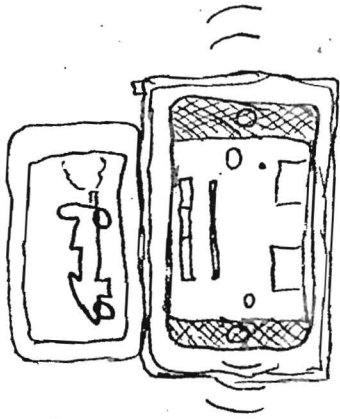
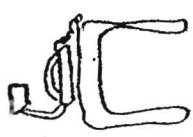


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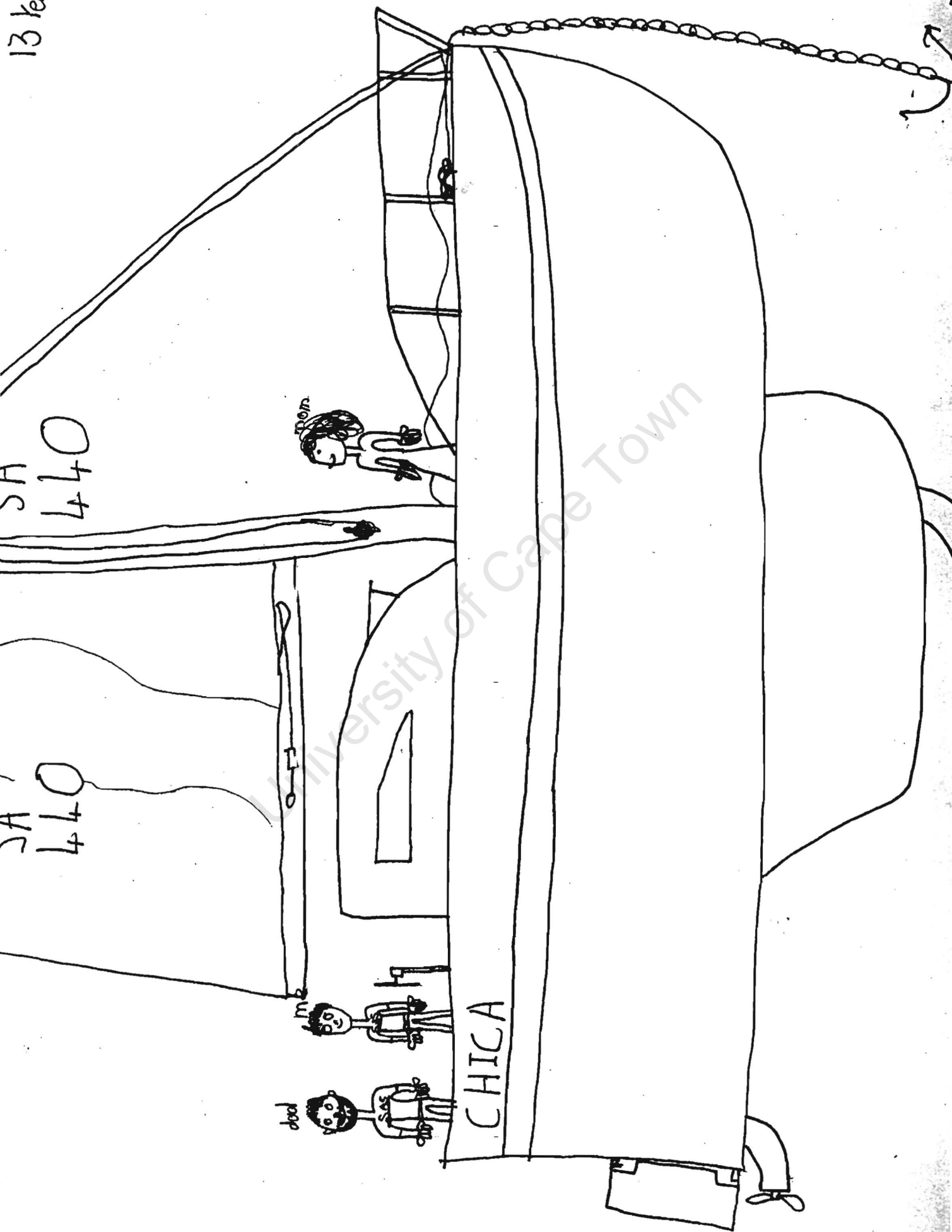


My Family





13 years old



SA 440

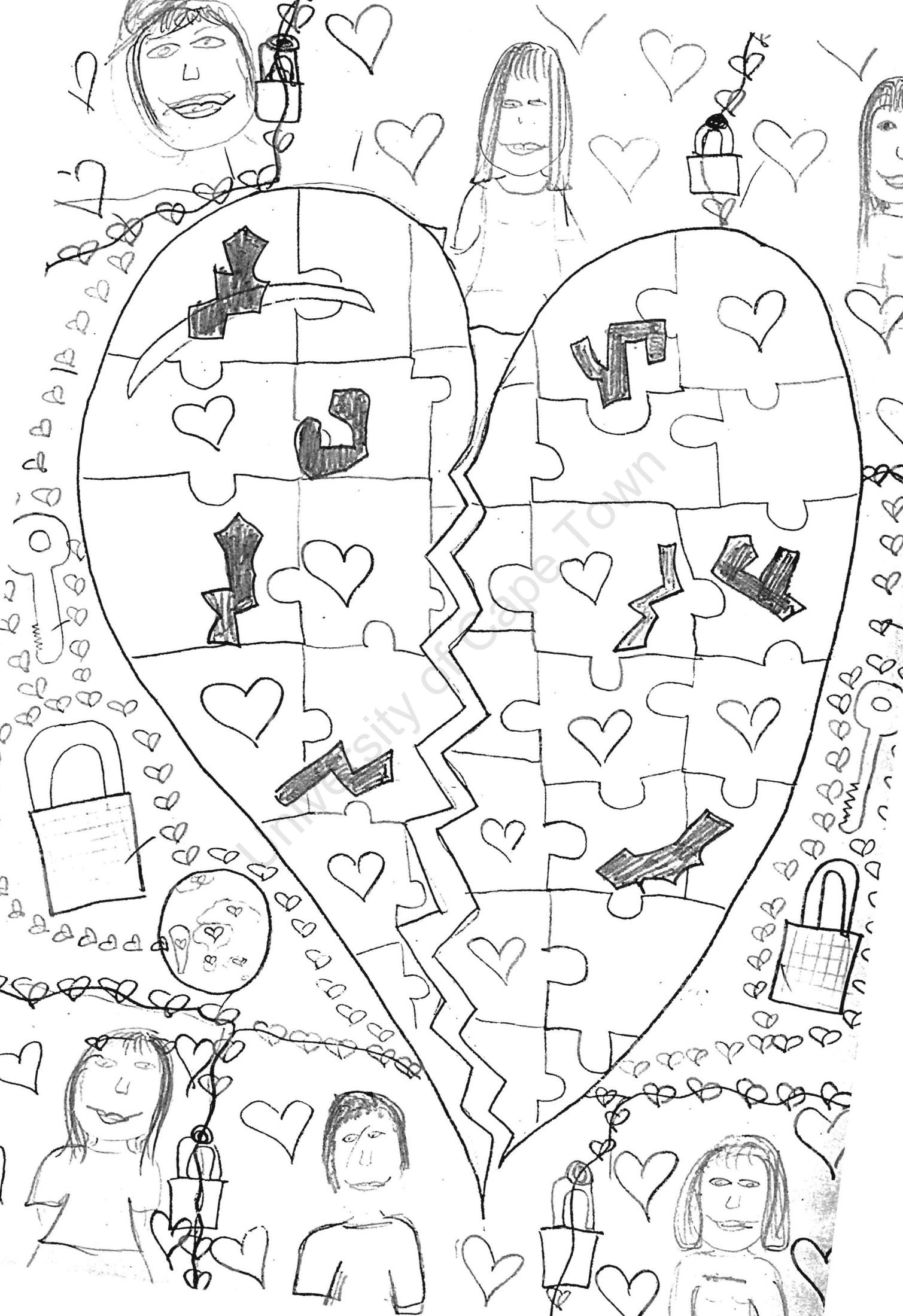
SA 440

dad

SAS

CHICA

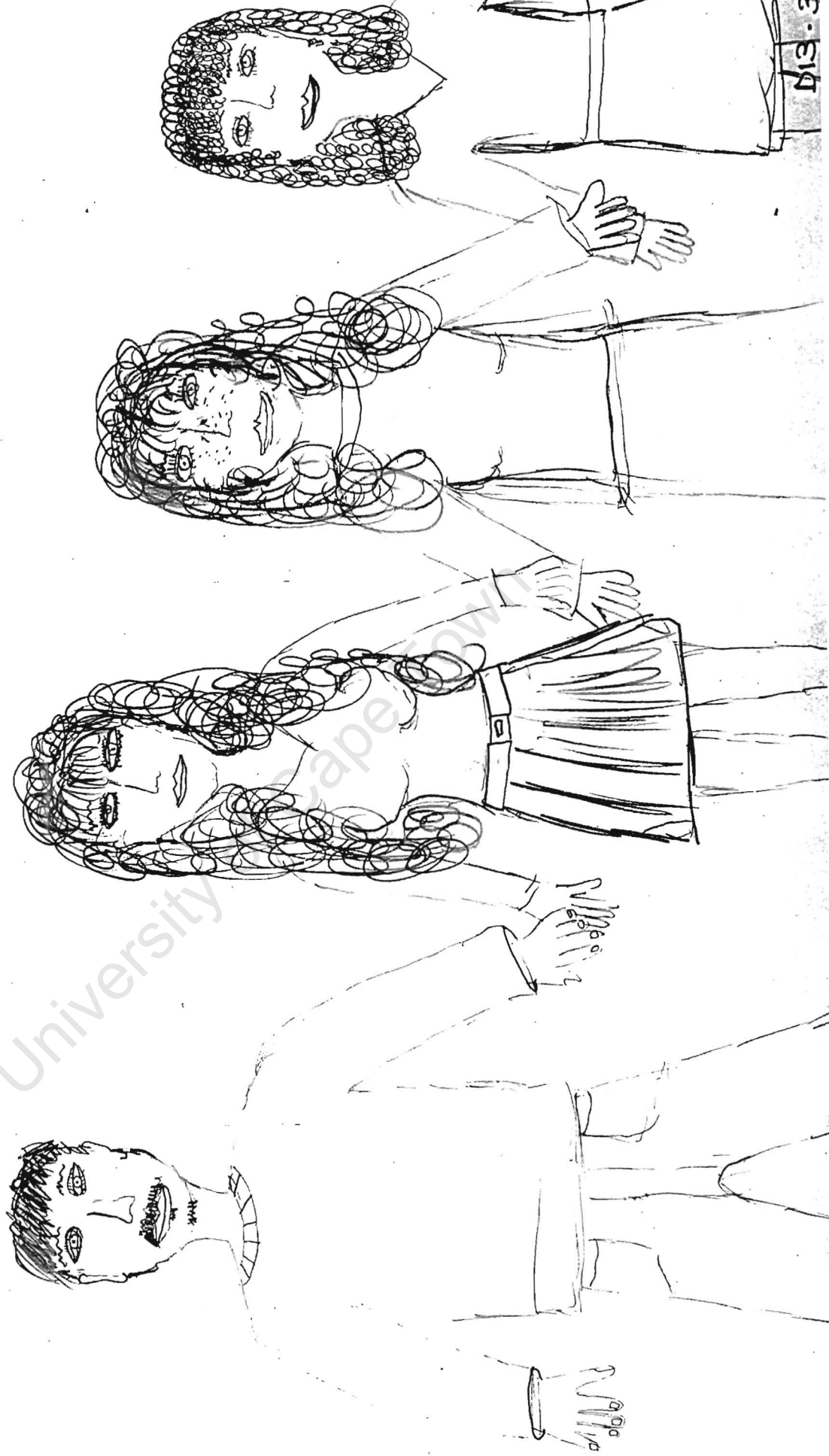
mom





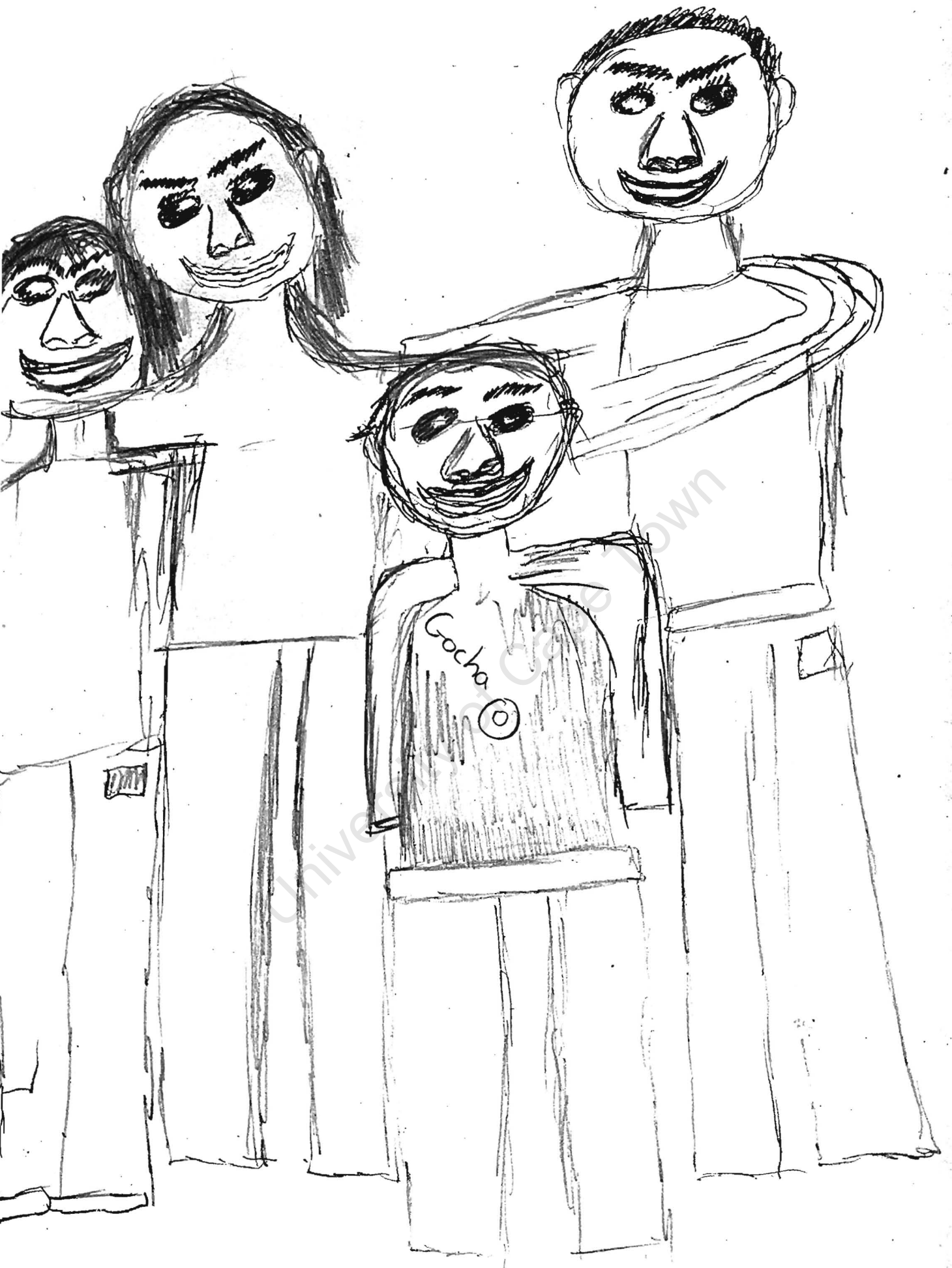
University of Cape Town

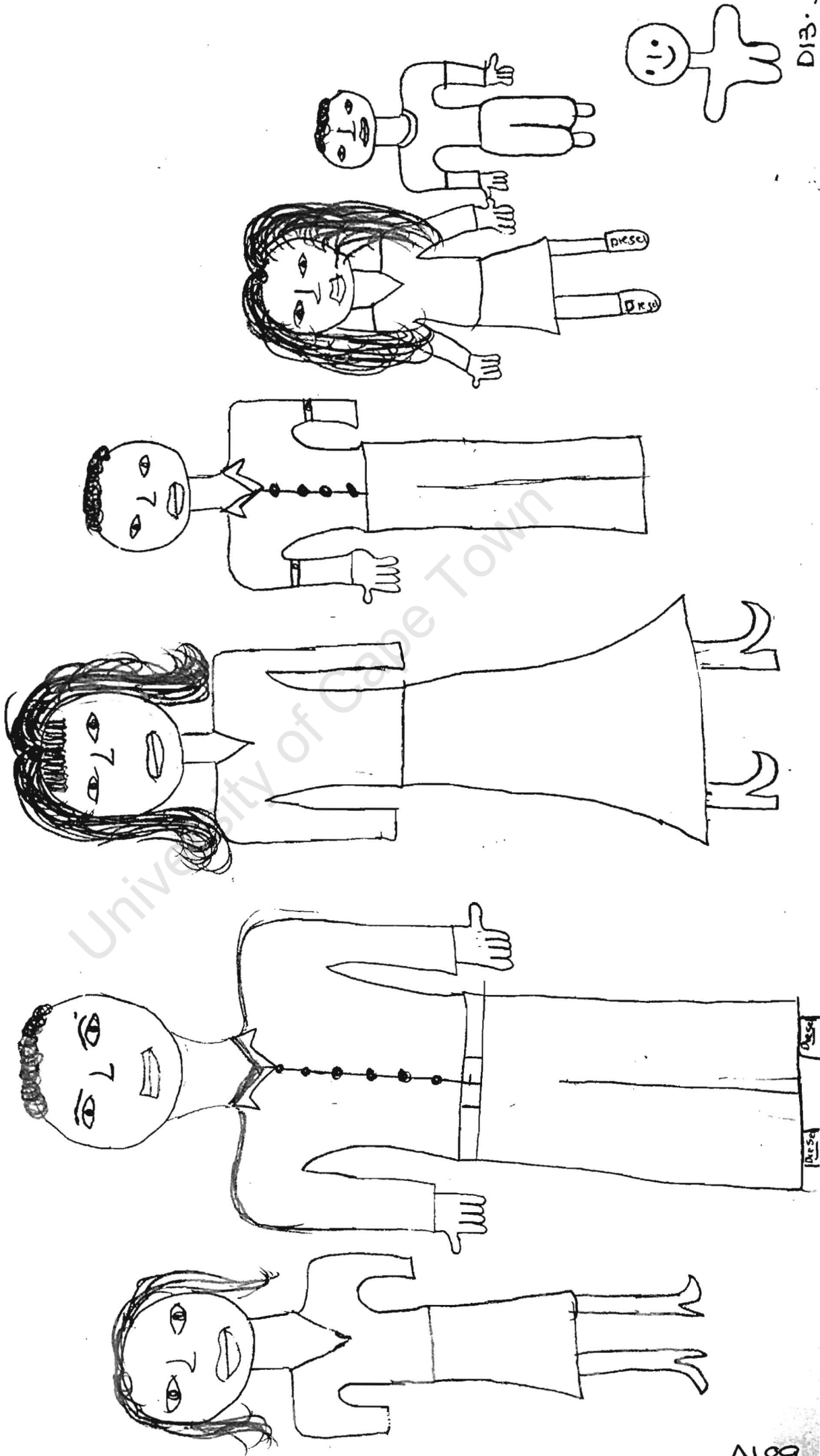
age: 13



A187

113-3





University of Cape Town

