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How To Read Childrens' Drawings

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Ani Zlateva

Fifth Monograph in Resilience and Health, Centre for Resilience and
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Fifth Monograph in Resilience and Health by the Centre for Resilience and Socio-Emotional Health, University of Malta

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We are pleased to publish the fifth monograph in the *Resilience and Health* series by the Centre for Resilience and Socio-Emotional Health at the University of Malta. The series aims to provide an open access platform for the dissemination of knowledge and research in educational resilience and social and emotional health. We have one e-publication per year in such areas as social and emotional development, health, resilience and wellbeing in children and young people, social and emotional learning, mental health in schools and professionals' health and wellbeing.

The publication of the Resilience and Health Monograph Series is based on the philosophy of the Centre for Resilience and Socio-Emotional Health, which develops and promotes the science and evidence-based practice of social and emotional health and resilience in children and young people.

We welcome contributions from colleagues who would like to share their work with others in the field.

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About the Author

Ani Zlateva, Ph.D. is Associate Professor of Art Education and Art Therapy at Trakia University, Stara Zagora, Bulgaria. She earned her Ph.D. in the psychology and pedagogy of art and habilitation. She teaches Art Education, Art Therapy, Art Diagnostics and various other courses. She also works as an art therapist with children and adults. Ani organizes various workshops, seminars and lectures on the theme of art as a way to develop children's personality. Her main scientific interests include art in childhood and art as a form of development of children's personality. In addition to her research, teaching and clinical practice, Ani works also as a sculptor in different European countries. She is also the author of books on art therapy, the use of space in children's drawings, the development of images in children's drawings as well as various research publications on art education, art therapy and personal growth through art.

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Chapter 1. Introduction

This chapter invites the reader to appreciate the importance of drawing for children and of how it can be of great use for adults to understand children. It also gives a brief account of the structure and content of the monograph.

Drawing is a favourite activity during childhood. Children usually draw eagerly with joy and pleasure. However, this activity is very often overlooked with a smile and indulgence by adults. The reason for underestimating the significance of children's drawing is based on the misunderstanding of the importance it has in their lives. The reason for this is that, in human communication, it is speech which is considered to be the main means for communication and, hence, it is accepted as one of the most significant milestones in children's development. The absorption of speech is a slow process and children learn to use it gradually. The development of speech and language results from the everyday communication of the child with adults. It is the culmination of the various forms of interaction between a child and the parents and care givers. They do it with a look, a touch, a smile and a gesture.

Along with verbal communication children start to assimilate another means of communication, namely the pictorial language of drawing. Vygotsky (1967) highlighted the importance of art activity in children's lives and recommended its encouragement to the same extent that parents encouraged speech and language development.

Children often prefer to share their emotional experiences like joys and fears through drawing rather than directly through words. It is, however, of extreme importance to uphold the principle of freedom whereby children are drawing of their own free will (Vygotsky, 1980). It is common for adults to neglect, underestimate and underrate drawing as a means through which children express their emotions. Indeed, they have a poor understanding of the graphic signs that children often use. In essence, this means that the meanings behind the drawings remain hidden to adults. When adults underestimate the significance of the information which the children are sharing through their drawings, the drawings appear unreadable and indecipherable. However, one way of entering into

this inner emotional world of children is to get to know the stages of development of children's drawing, the objects, the signs, the symbols and the principles of compositional building and space relations.

In the course of understanding children's drawings, we should bear in mind the drawing process as explained by Vygotsky (1967): "while children are drawing, they are thinking about the object of their image in the same way they would explain it with words. In other words, the connection between these two activities of speech and drawing is extremely strong" (p.117). Vygotsky (1967) also observed the significance of visual perceptions and how these improved in the course of art activities and their connection with the other sensorimotor modalities during the drawing process.

Golomb (2004) another important researcher who studied children's drawings, asks fundamental questions about the stages of graphic development, the cultural environment and the way children represent three-dimensional space on the two-dimensional sheet of paper. She does not see drawings as "print-outs" of a child's mind. Using Arnheim's representational theory, she sees drawings rather as exemplars of particular visual representational schemata that are generally available to and employed by young children.

According to Malchiodi (1998), children's drawings have multiple meanings, reflect many factors and are influenced by many things. She posits that, if art therapists were able to approach drawings from the multidimensional perspectives, they would be able to better understand children, their problems and their potential.

In this book I take a look at the peculiarities, complexity and importance of the art process during childhood. I present the outlooks and understandings of a series of researchers in their description of this process. I also state the most important indicators which characterise the art process and which can be accepted as a basis when defining the stages of children's development.

I represent in detail the stages of development in child art as I take into account the opinions of some of the most significant researchers of children's drawings including Vygotsky, Read, Golomb, Malchiodi and Manova-Tomova. The stages of development in children's art are

illustrated through the drawings that children have created in my presence and under my supervision. Moreover, the rich illustrative material is accompanied with my personal thoughts and conclusions connected to these drawings. The in-depth knowledge of these stages and the fine shades in the differences in the usage of forms, shapes, details, colour, space and compositional building in children's drawings, can guarantee a deep understanding of their drawings. The thorough introduction with the characteristics of the separate stages of development of the drawings provide a sound knowledge of the methods of evaluating children's development through their art activity.

Moreover, in this book I represent one of the most often used drawing methods in contemporary psychological and pedagogical practice. I also show some of the basic principles in the diagnosis of children's drawings and diagnostic drawing tests.

In this monograph I have attempted to answer the question: Why should we use drawing tests as a diagnostic tool with children? Children's drawings reveal two important dimensions of their development: their intellectual and their socio-emotional development. Both these dimensions are addressed in this publication. Among the most popular drawing tests I have included the Draw-a-Person test (DAP), based on Goodenough's methodology, which seeks to evaluate the degree of intellectual development of the child based on the drawing of a human figure. I have also included another aspect of the same test: The Draw-a-Person-test (DAP) based on Machover's methodology. I have also looked into some of the methods in evaluating family and social relationships in the lives of children, which can be studied using Burns and Kauffman's (1970) Kinetic Family Drawing technique (KFD) and Prout and Phillips' (1974) Kinetic School Drawing technique (KSD).

When presenting these tools, I have included a significant number of children's drawings in an attempt to answer the question: "What can we see in children's drawings?" The rich illustrative material of drawings of the human figure by children with delayed intellectual development, or by children showing different development peculiarities, reveal the differences in the depiction of human figure by different children.

In the section which addresses the drawings of the family, I have tried to represent the drawings of children who are growing up in the traditional

nuclear family and those of children who are growing up in incomplete or extended families. Moreover, through the illustration and analysis of drawings on the subject “Me and my Friends in Kindergarten”, evaluated according to the KSD technique, I have tried to represent some of the ways children depict social relationships in their drawings.

The last part of the book illustrates plot drawings showing children’s different traumatic experiences. Examples are given on how we can evaluate children’s emotional experiences and expressions with different thematic drawings without using a specific projective methodology albeit based on their main principles.

This book is for teachers, school and child psychologists, parents and anyone who has an interest in the development and understanding of children’s art. The examples provided throughout this book are entirely taken from my personal practice in my work with children in fine arts. For almost 20 years I have collected, looked through and analysed children’s drawings. I have trained children to draw and have been learning from their drawings and the experiences which they readily and sincerely shared. The strong emotional load which the drawings carry convinced me of the significance of the messages which children put into them. Knowing the stages of child art development is the basis of understanding and analysing children’s drawings. The combination of my personal experience from my work in art education and that in therapy, have led to a significant depth in their interpretation and adequacy of their understanding. In my experience, a good understanding of children’s drawings can guarantee a more thorough insight into their world which they share in the graphic images of their drawings.

Chapter 2. Why is it important to research Children's Drawings

This chapter introduces the reader to the development of theory and instruments in the study and use of children's drawings. It describes how drawings can be a demonstration of children's level of understanding of the world as well as a means for children to express their thoughts and emotions. It suggests that adults should try to understand the messages that children are expressing through their drawings.

2.1 The value of children's drawings

When we start becoming interested in children's drawings, it is important to first start to look for the answer to the question: Why is it important to research children's drawings? Three important reasons are presented in Figure 1, namely that children's drawings are a demonstration of their developmental progress; that they provide a window into their inner world and their perspective on what is going on around them; and that they are a universal and effective means of communication between children and adults.

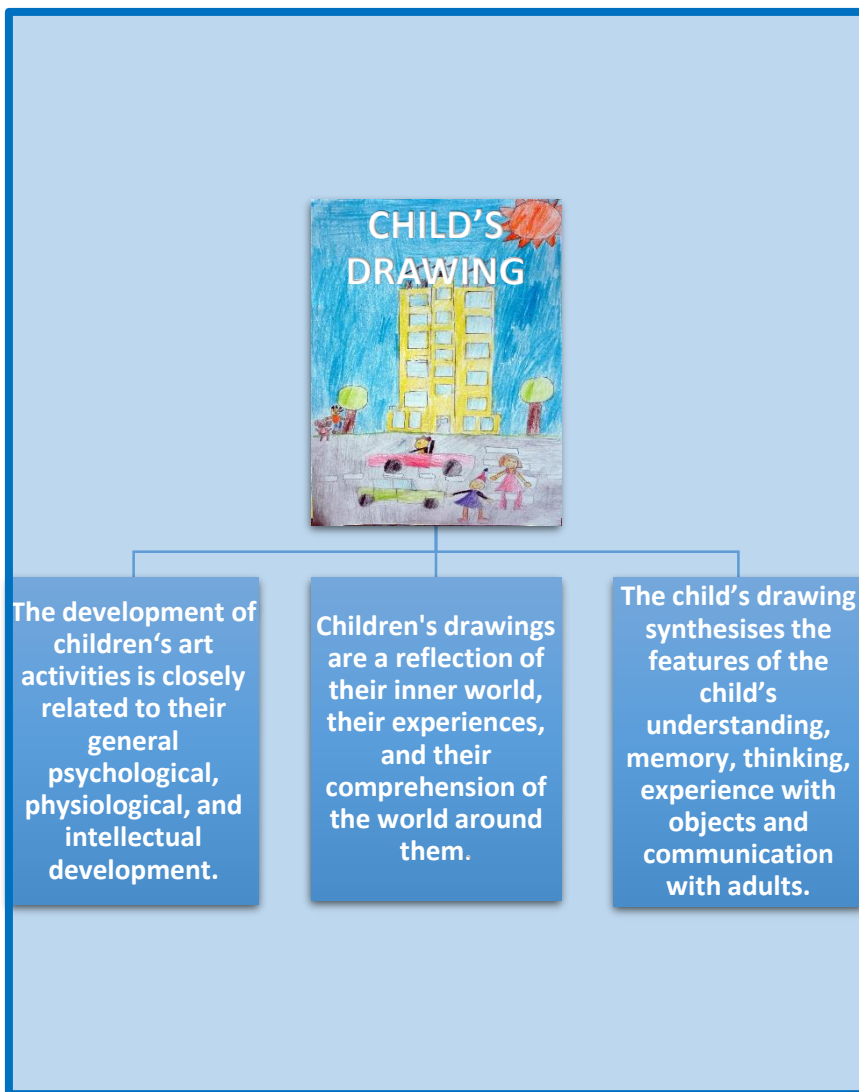


Figure 1. Why it is important to research children's drawing

2.2 Some of the first researchers on the art activity of children

Children's drawings have attracted the interest of researchers from all around the world since the beginning of the twentieth century. Famous among these are Georg Kerschensteiner, Corrado Ricci, Lev Vygotsky and Florence Goodenough.

The first collection of 1,250 children's drawings and sculpture pieces was assembled by an Italian art historian, Corrado Ricci (1858–1934) in his publication *L'Arte dei Bambini* [Children's Art] (1887). In this book he noted that art as such is unknown to children, and that at their early stages of development they cannot artistically reproduce an object. Ricci went on to describe some of the most important features of children's drawings such as the transparency of the objects; the attraction of the object chosen for depiction; the tendency to draw from memory; and the depiction of the more important details rather than the realistic likeness with the real object.

Psychologists' interest in children's art was reflected in the work of Georg Kerschensteiner entitled *Die Entwicklung der Zeichnerischen Begabung* [The development of the drawing talent] (1905). At the beginning of the 20th century, Kerschensteiner conducted an extensive research on children's drawings on the basis of the analysis of around 100,000 drawings. Kerschensteiner established four stages of development in the drawings:

1. "Stage of schema" – the child is using symbols to depict his idea of the object.
2. "Stage of incipient feeling for line and form" – the drawing shows a visual similarity with the object.
3. "Stage of representation according to appearance" - the proportions and the construction of the object are depicted correctly, but there are NO light and shade effects.

4. "Stage of representation according to appearance with light and shade effects" - in the fourth stage the form of the object is correctly depicted using light and shade effects.

In the periodisation of children's drawings, Lev Vygotsky refers to the stages defined by Kerschensteiner. He posits that in the first stage (the Schema stage) the child is drawing a schematic image of the object, which does not look the same in reality. This means that the child is drawing from memory and not what he or she actually sees. The child is not drawing the actual object but what he knows about the object and the object's features that are most important to him. Vygotsky thinks that artistic development should be challenged and encouraged just like linguistic development which helps cognition and the growth of perception. He also stresses the value of the creative action of play by children.

John Lewis (1997) considered the child's drawing as an activity that had three main stages:

Stage 1 Scribbles.

Stage 2 Symbolic shapes that are given names.

Stage 3 Descriptive drawing based on a degree of analysis.

Herbert Read (1966) proposed seven stages in the development of children's drawings in his book *Education through Art*:

Stage 1 (2 - 4 years) Scribble

Stage 2 (4 years) Line

Stage 3 (5 - 6 years) Descriptive Symbolism

Stage 4 (7 - 8 years) Descriptive Realism

Stage 5 (9 - 10 years) Visual Realism

Stage 6 (11 - 14 years) Repression

Stage 7 (14 years) Artistic Revival.

It is also worth mentioning that Piaget (1929) had considered the development of children's drawings as part of their development of the conception of space which he also organized along his four stages of

cognitive development. He followed the early theory about children's development of drawing proposed by the French art historian, Luquet, who had grouped his daughter's drawings into four stages: Casual Realism, Missed Realism, Intellectual Realism and Visual Realism. Piaget suggested that during the first cognitive stage - Sensorimotor Stage (0-2years) - children produce random scribbles where the concern is more with motor coordination. Then, during the Preoperational Stage (2-7 years), children produce representational circular human forms in frontal positions. Other popular subjects in children's drawings are buildings, animals, and plant life. The colours of the objects remain secondary to subject matter. Then at the end of this stage and beginning of the third cognitive stage of Concrete Operations (7 – 11 years) children begin to draw intellectually realistic representations of objects where they include details of objects that they know about even in their flat drawings: for instance, they will draw the four legs of a table coming out of the corners of the table. It is only towards the end of this stage of Concrete Operations that they apply visual realism by drawing what they can see – and so would draw only the two legs of the table that they can see. No clear indication of how this was further developed in the fourth cognitive stage of Formal Operations was given by Piaget.

These Piagetian proposals were modified and clarified in information processing terms by the neo-Piagetian theorist Robbie Case (1992). Case retained the idea of the four stages in cognitive development which he also applied to children's development of mastery in the art of drawing:

- *Stage 1 - Sensorimotor Stage (0 – 2 years):* From 13 to 20 months, infants become capable of coordinating two action- reaction pairs that are quite separate and linking them in real time. And as a consequence of this they see the relations of the crayon as a device capable of producing a delightful set of patterns on a flat surface when moved across it. They can manipulate a crayon and focus on the marks they make on paper to produce a scribble.
- *Stage 2 - Interrelational Stage (2 – 5 years):* In this stage children become able to focus on the type of scribble to produce the representation of an object. First they learn to form different

patterns - e.g. horizontal and vertical lines, circles; they then learn to combine them to make a representation of an object - the sun, or people, or a bike.

- *Stage 3 – Dimensional Stage (5 – 10 years)*: During this stage, children first learn to create a scene: at 6 years they draw the ground or the sky in addition to people; or develop a much more differentiated representation of a person. But initially they are not able to focus on the third dimension - depth. From around 8 years of age children start to differentiate between the foreground scene and background scene, and 10-year-old children can “introduce a “middle ground” as well as a foreground and background, and thus draw a picture in which space appears to have more continuous quality” (Case, 1992, p. 178).
- *Stage 4 – Vectorial Stage (11 – 18 years)*: During this stage, children become capable of apprehending and drawing relationships at a higher level. Case investigated the development at this period of the “point of view” someone takes when looking at a scene: adolescents were found to be able to conceptualise and draw a scene not from the perspective of the artist but from the perspective of another scene” (Case, p. 178). Thus they are able to produce two different scenes into one coordinated scene.

In the contemporary pedagogical literature, including the works of Golomb (2004), Lewis (1997), Malchiodi (1998) and Stamatov (1998), amongst others, two periods with a few stages are described:

- 1st Period Pre-representational drawing. Scribble stage - stage of psychomotor actions.
- 2nd Period Representational drawing. Conscious art activity, which includes separate individual objects, symbolism or narrative drawing, and realism and transition from a two-dimensional to a perspective depiction.

2.3 Indicators for the characteristics of the Art Activity

The stage of development of every activity depends on the conditions of development of the individual, the specific historical conditions, as well as the cultural and scientific achievements in combination with the individual's psychophysiological and genetic constitution.

It is important to characterise the features of art activity that appear during a free, unguided art process, and those which appear in the conditions of an effective learning process.

Loss of interest in art activities in the different stages of development could be overcome through the appropriate pedagogical and methodological means.

Different researchers refer to different indicators of the stages in the art activity of the children (Golomb, 2004). These indicators can be classified as follows:

- **Object matters:** the drawn objects are used as indicators with the focus on their characteristics, quality in the drawing, the grade of their correctness and the sequence of their depiction through the different age stages. According to these indicators, three age stages are defined: depiction of a human figure, depiction of objects, depiction of animals.
- **Formal indicators:** the means of expression and technique are analysed and their development in the different stages is reported.
- **Relation to reality:** the compositional, dimensional, thematic aspects are considered.

All authors who research the stages of development of children's drawings, try to include these indicators.

Malchiodi (1998) notes seven developmental stages of children's artistic expression: namely Scribbling; Basic Forms; Human Forms and Beginning Schemata; Development of a Visual Schema; Realism; and Adolescence. These stages are a foundation for understanding children's drawings in general. "Knowing what is "normal" or expected

for a particular age group provides a baseline for comparing what is unusual or unexpected in children's drawings. Understanding children's drawings through a developmental lens not only provides information important for evaluation, but it also establishes a starting point for creating effective interventions." (Malchoiodi 1998, p. 186)

Golomb marks three stages in the development of children's drawings:

- First - From Action to Representation;
- Second - The Origins of Early Graphic Forms: The Puzzle of the Tadpole Man;
- Third - Differentiation of Forms and Early Graphic Models.

In the last stage she describes space as a way of searching for the missing dimension in the drawing and the color, effect, and expression in the depiction of mood and feelings. Golomb defines the composition as a way of the creation of pictorial space and the communication of meaning (Golomb, 2004).

When considering the issue of periodisation of a child's drawing, it is of utmost importance to consider those indicators which will be included in the characteristics of the art activity and the analysis of its separate ingredients, namely: the means of expression; the development of the image and the dimensional, compositional, and thematic factors as seen in Figure 2.

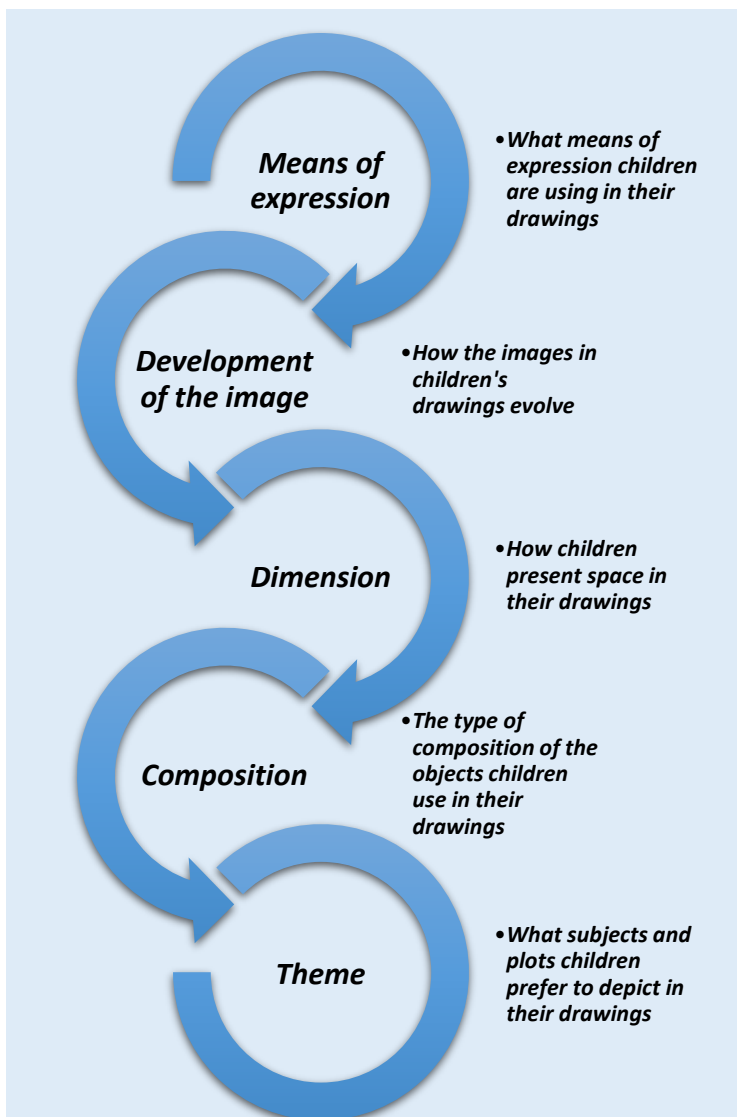


Figure 2. The variety of dimensions that characterize children's drawings

2.4 The Drawing Process

Art activities are a way for children to get to know their surrounding reality. By supervising children's art activities as they grow, we notice that the very act of observing objects and the environment which surrounds them, provokes in them a desire to recreate those objects in their drawings. In depicting objects and their surrounding environment, children are enhancing their power of observation and, hence, their desire to draw shapes more precisely as well as to add more and more details to their drawings.

Drawing, in its simplest sense, is the depiction of forms, shapes, and images with lines. It very often involves using a drawing instrument of some kind to make marks on paper, although one can draw lines in the sand or even through the air with one's fingers. Drawing for children involves both a process (making of art) and a product (the completed art expression). It is the latter, the product, that helps professionals focus on as they seek to better understand the child. However, before one can begin to truly understand the meaning of children's drawings, one needs to understand the process of drawing (Malchiodi, 1998).

Understanding the importance of drawing in the course of children's development should begin with the understanding and realisation of the complexity of the drawing process. If we try to illustrate this process using some key psychological processes, motor and cognitive actions which are a main part of accomplishing its creation, we should take into account the essential part that visual perceptions play.

When talking about children's drawings we should not forget the main law of children's creativity. The value of children's creativity should not be sought in the result, the product of creativity, but in the process itself (Vigotsky, 1967). However, although the satisfaction from the action of art activities is characteristic for the first stages of the development of children's creativity, at the end of the art process there is the product which is strongly related to the personality of its author.

In describing the creativity mechanism as a process, Vigotsky (1967) noted that at the very beginning of this process there are always outside and inside perceptions through which, according to him, the basis of our

experience is being built: “What the child sees and hears is the first basis of its future creativity” (p. 17). Seamon and Kenrick (1994) define perceptions more as a means of knowing the world, and not as “windows through which the world is penetrating into us”. Our brain is actively interpreting the information it gets from the sensory organs and, in this way, different perceptions are being formed.

On the basis of these visual perceptions we keep different visual information in our brain. The images which are being formed through interpretation of the visual information we received are so perfect that they are practically the same as the original (Seamon & Kenrick, 1994). According to Vigotsky (1967) storing this visual material is at the basis of the development of fantasy which is formed as a consequence of a course of processing the material which is a lot more complicated. As one of the main components of this process he defines association and dissociation of visual perceptions.

If we try to generalize, we could say that, for the drawing process to be realised, a few psychological, cognitive and motoric processes are required. Without trying to be comprehensive, Figure 3 gives a list of some of these processes:

- Visual Perception - development of the reader's perceptual abilities;
- Visual memory – an important part in drawing as one's gaze shifts between the object being drawn and the drawing itself;
- Imagination and fantasy - processing and combining the received and stored visual information;
- Decision-making - spending more time on 'metacognitive' activities such as considering different hypothetical plans on how to progress with a drawing;
- Motor control - motor control plays a role in the drawing ability, though its effects are not significant;
- Drawing skills – the level of development of the drawing skills which form during the process itself;

- Evaluation and self-evaluation - children's own perception of their drawing.

The development of the art activity, according to Muhina (1981), unfolds in the following way: "First the child starts to practically master the graphical movements, and the orientational activity here is aimed at analysing the characteristics of the materials – the pencil and the paper" (p.17). Next, a new section is included – the storm-like appearing graphic traces with different configuration. "... At one stage," she says, "scribbling acquires a new purpose – leaving a trace with a certain shape" (p. 48). According to Muhina, at approximately the same time in the development of graphic activity, the "sign function of the consciousness" begins. The child starts to perceive graphic images as a substitute for real objects and is able to distinguish different objects in the accidental outlines being created. This stimulates the assimilation of this type of combinations, but time is necessary to make this recreation a conscious process (Muhina, 1981, p. 81). Muhina also states that the repetition of certain configurations starts to become easier with age. She thinks that the orientational part of this activity is done subconsciously and becomes a point of view. This, she says, is the graphic image, that is the idea of how a certain object should be drawn.

A very precise explanation of children's perceptions and their reflections in the act of drawing, is provided by Antoine de Saint-Exupéry in his book *The Little Prince* (1943). This explanation is presented at the very beginning of the book. It is extremely short and ingeniously illustrated with two simple drawings which earned great popularity worldwide.

Firstly, Saint-Exupéry tells us the age at which he created these drawings and the image which inspired their creation (Figure 4, Drawing 1). Then he shares the illustration of the drawings and the way adults reacted on them (Figure 4, Drawing 2).



Figure 3. The drawing process

Once when I was six years old I saw a magnificent picture in a book, called *True Stories from Nature*, about the primeval forest. It was a picture of a boa constrictor in the act of swallowing an animal. Here is a copy of the drawing (Drawing 1).



In the book it said: "Boa constrictors swallow their prey whole, without chewing it. After that they are not able to move, and they sleep through the six months that they need for digestion."

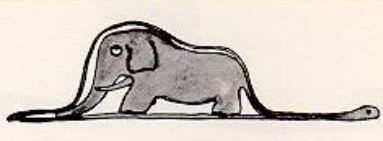
I pondered deeply, then, over the adventures of the jungle. And after some work with a colored pencil I succeeded in making my first drawing. My Drawing Number One. It looked something like this (Drawing 2):



I showed my masterpiece to the grown-ups, and asked them whether the drawing frightened them.

But they answered: "Frighten? Why should any one be frightened by a hat?"

My drawing was not a picture of a hat. It was a picture of a boa constrictor digesting an elephant. But since the grown-ups were not able to understand it, I made another drawing: I drew the inside of a boa constrictor, so that the grown-ups could see it clearly. They always need to have things explained. My Drawing Number Two looked like this (Drawing 3):



The grown-ups' response, this time, was to advise me to lay aside my drawings of boa constrictors, whether from the inside or the outside, and devote myself instead to geography, history, arithmetic, and grammar. That is why, at the age of six, I gave up what might have been a magnificent career as a painter. I had been disheartened by the failure of my Drawing Number One and my Drawing Number Two. Grown-ups never understand anything by themselves, and it is tiresome for children to be always and forever explaining things to them.

Figure 4. Adults fail to understand children's drawings (Saint-Exupéry, 2001, p.4)

In just a few sentences and three illustrations, the author presents us with the emotionality of children's reactions when perceiving certain objects. Then, we see the very "stylized" way of depicting those impressions. Consequently, Saint-Exupéry shares his disappointment at the way adults reacted to his drawings: they usually do not find the meaningful image in those significantly generalized drawings or, as in this case, they associate them with something else.

If we pay closer attention to the illustration of a "boa constrictor digesting an elephant", we will see that it represents the typical syncretic perception children have and the way they illustrate objects from the surrounding reality. At a young age, children choose this way of drawing as an exact and precise graphic language of sharing the information they have gained with others.

In Drawing 2 (Figure 4) we can see the way of depicting that suits most children at a young age. In Drawing 3 (Figure 4) the author illustrates the way of depicting which suits adults and makes children's drawings more understandable. For children, the "drawing of a hat" is a clear enough way of depicting a "boa constrictor digesting an elephant". Adults need much more detail to get the same meaning of a certain image as the author shows in the third illustration in Figure 4.

In the third illustration the author formulates a significant problem which is also the case in the whole book. This is the problem of not knowing and understanding the graphic language in children's drawings. Children clearly share their experiences in their drawings but adults are not able to "translate" and understand this information.

Another problem in the course of the development of children's drawings which Saint-Exupéry shares in this short text is the refusal to occupy himself with art activities. Children stop drawing at this age precisely because of this strong emotional attitude towards the activity and their painful experience from the reaction of adults to their drawings. A lot of adults themselves have similar childhood memories about certain events which made them decide never to draw again. Generally, the memory of those precise moments is still very clear: they can recall the exact reaction and words of the adult (a parent or teacher) who provoked such a negative emotional response in them, the strong feeling of being

misunderstood and, consequently, the reluctance to continue drawing. Later on in life, they often express the desire to take up drawing again and join art courses with the hope of developing their art potential and creativity.

Malchiodi (1998) gave the same example with Saint-Exupéry's drawings and remarked that this excerpt also underscored an important point in understanding and responding to children's drawings: It is difficult for adults to see children's drawings with anything but their own adult eyes. It is hard to remember the imagination, creativity, and lack of rules that children have about art expression, and often, in responding to their work, it is easy to be judgmental rather than open to many diverse possibilities (Malchiodi, 1998).

It is precisely for this reason that a sound knowledge of children's drawings is an essential part of the education of future parents and teachers.

Chapter 3. Stages of Development in Children's Drawings

On the basis of my 20 years of experience in researching children's drawings and taking into account the work of other researchers on children's art, in this chapter I present the evolution of children's drawings, starting from its first manifestation – “scribbles” - and tracing its development through the different age periods. This chapter starts with an account of the pre-representational drawing or scribbling stage that usually starts around the age of 15 months and continues up to about 3 years of age. It then describes and illustrates the stage of "representational drawing" which marks the beginning of children's conscious art activity - a period that normally lasts from 3 to 5 years of age. This is followed by a description and illustration of the next period of development of children's drawing, often named "symbolism" (between 5 and 7 years of age), which produces a kind of narrative drawing as children usually use different symbolic images to narrate their experiences, life events and emotions. Finally, an account is given of the fourth stage that normally starts soon after 7 years and continues up to 14 years of age, when children show a tendency towards depicting objects realistically. Attention is also drawn to the fact that these age boundaries of stages are approximate markers and can vary in accordance with the child's individual development of educational skills, psychological and motor development, social environment, and access to art materials, among others.

3.1 Pre-representational drawing (scribble stage: 15months-3years)

The first stage of the development of the art activity is called the “scribble” stage. This usually goes into the end of the third year at which time the child starts creating the first meaningful image. There is no clear standpoint for the beginning of the period when the first art activities take

place. According to some authors, children begin to get acquainted with art materials before one year of age while others claim that we cannot speak of art activities before the child turns two. Hence, the determination of the exact age of the beginning of art activities depends on what we accept as art activity and on the dynamics of a child's personal development. In the "scribble stage" period children do not create meaningful images: they simply leave traces with the pencil or crayon on the sheet of paper. These scribbles also have their logic and relation to the age of the psychophysical development in which they appear.

The "scribble stage" usually begins at the beginning of the second year and comes to an end when the child is 3-3 ½ years old. The duration and dynamics of the development of the activity is different. The first graphic shows commonly appear by accident while the child is trying to manipulate the materials, the pencil and the sheet of paper. In those first attempts it is obvious that the child is interested in the pencil, and not in the traces it leaves or the created image.

The first manifestation of art activity in the "scribble stage" usually takes place around the age of 15 months. Manova-Tomova (1974) defines it as a show of a normal development when the child can hold a pencil and leave traces with it. When describing this activity, Manova-Tomova (1974) emphasizes the fact that the child does not always use the pencil for scribbling, but once he "discovers" that he can leave traces with it, and after this has been shown to him, he always tries to use it for its purpose.

Those first scribbles appear to be quite clumsy and often look like those seen in Figures 5 and 6.



Figure 5. Scribbles of Z. at the age of 15 months



Figure 6. First attempts at leaving traces with a pencil (pen), during the “scribble stage”

Lines have a changing direction and thickness, there is a lack of striving for the lines to be placed only within the borders of the sheet of paper and it all looks more like an investigation of the art material, and nothing like a drawing.

At this stage we cannot talk about children making any attempts at orientating in space and depicting that space on the sheet of paper. During this spontaneous scribbling, the child does not accept the sheet of paper as a limited field in which to place scribbles. It can be said that the sheet, works as a starting point from which the scribbles begin but these are never limited to its borders. In fact, the scribbles usually begin on the sheet of paper but end up on the surface of the table, desk, or any other surface on which the sheet of paper has been placed.

At 18 months the child is already beginning to scribble spontaneously and with diligence, as he or she starts acquiring more ability in handling the art material. The availability of spontaneous scribbling, according to Manova-Tomova, shows that the child is developing an ability to comprehend an object and use it for scribbling.

At this stage of development of the activity, although children show an enthusiasm when drawing, they quickly lose interest: the action of drawing itself is more interesting than the result on the sheet of paper.

The “drawings” of the child at the age of 18 months are usually long horizontal, vertical or tilted lines. During this stage, children are still unable to take into account the borders of the sheet of paper. There is joy in simply seeing the result of the activity as the child is still not interested in the type of lines that have been created and where they have been placed. After the end of the manipulative activities with the materials it loses interest in the result which has been achieved. For the child, the direction and form of the lines and their placement on the sheet of paper do not matter. Figures 7 and 8 are an illustration of this. They demonstrate how, at 18 months, the child is scribbling spontaneously and with diligence. The scribbles have a constant direction and pressure. Figures 7 and 8 also show how the child does not respect the boundaries of the sheet.

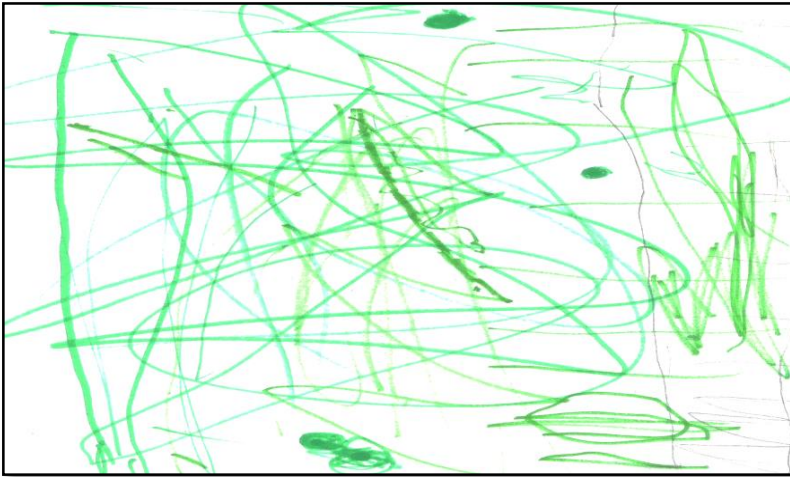


Figure 7. Spontaneous scribbles of a child at the age of 18 months



Figure 8. Drawing of long vertical and horizontal lines of a child at the age of 18 months

At this age, children start to get pleasure out of drawing. Figure 9 is an example of the child's enthusiasm to draw on any surface which is available and not only on the sheet of paper as the adults would very much like them to.



Figure 9. Before the age of 21 months, children take pleasure in drawing on any surface

It is around the time that children are 21 months old that they start to place their scribbles inside the sheet of paper. Manova-Tomova (1974) defines this as the first step in mastering the “technique” of the scribble stage. Despite the fact that the child is still holding the pencil in a rather clumsy manner, the scribbling is already under the control of the eyesight. That is why children can now start limiting the scribbles to the borders of the sheet of paper if that has been shown to them. The line type during this stage is of an even thickness and takes a constant direction. There are generally many parallel lines, which are oriented in the up-and-down direction, left-to-right or diagonally as can be seen in Figure 10.

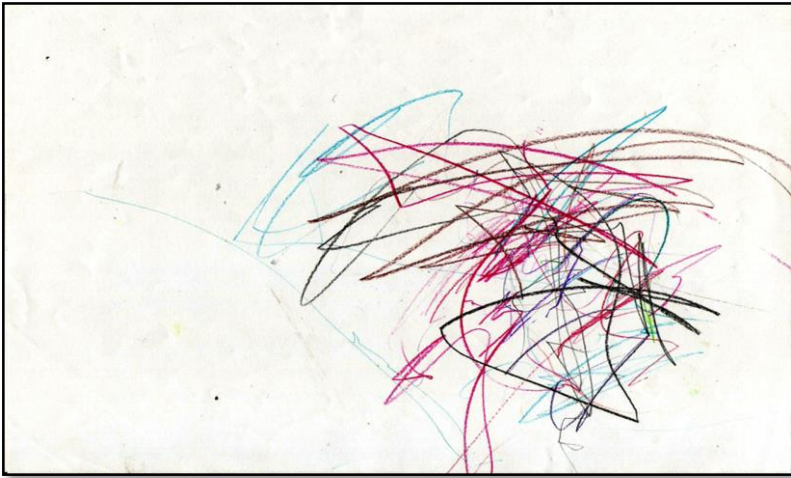


Figure 10. At the age of 21 months, children start placing their drawings inside the sheet of paper

Limiting the scribbles to the borders of the sheet of paper marks an essential progress in the presentational and pre-representational (scribble) art activity of children. They have already become aware of the functions of the art materials: not only the pencil, but also the sheet of paper. This moment is extremely important because the limiting of scribbles to the sheet of paper means that the child has accepted the sheet as a drawing field (Figure 10).

At the age of 24 months, children are expected to draw by imitating vertical and horizontal lines. Just by deliberately drawing a few lines, children are showing their readiness to get out of the scribble stage (Manova-Tomova 1974). This ability shows that children are able to concentrate and with the movements of their own hands to imitate a movement they have seen someone else make. This is a sign of the growing eyesight control on the movements of the hand. At this initial stage, the horizontal and vertical lines, which children imitate, are hardly straight and confident. Their appearance is similar to that in Figure 11.



Figure 11. Drawing of a child at the age of 24 months, depicting still unconfident lines, but showing readiness to get out of the scribble stage

There is a small number of children who are more observant and intrigued by the art activity itself and can use this ability to draw a straight line to depict a meaningful image. However, these cases are extremely rare because the child is still in the scribble stage and meaningful images are created very rarely, almost by accident. Examples of such an exception in the scribble stage are the drawings shown in Figures 12 and 13.

These two drawings are those of a two-year-old depicting a cupboard. The image is easily recognizable and the child created it while sitting in a room with cupboards. We cannot say that the two-year-old child had the tendency to draw what he saw. He ingeniously used the ability he had just acquired to draw straight vertical and horizontal lines. Meeting the ends of those lines and “closing” the rectangular form is quite a difficult task, and is normally implemented at the age of four. Once again I would like to emphasise that here we are talking about an exception, namely that

some more observant children can incorporate the ability they have just acquired into drawing a particular form.

In this case the question of what happens with space orientation is essential. We could say that it still does not exist because the presented images are cut out of the “context” of the whole drawing which abounds in lots of other images.

What we can see in this isolated case also happens in the general case as will be explained below when examining the space relations in children’s drawings. This is the time when the first meaningful images start to appear.

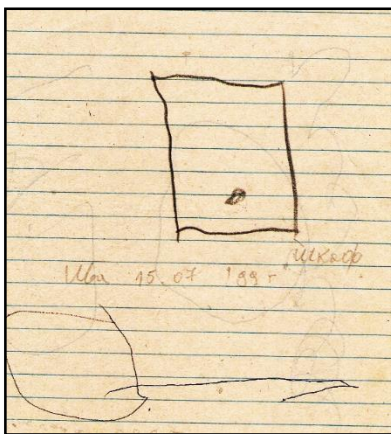


Figure 12. Drawing of a cupboard (a)

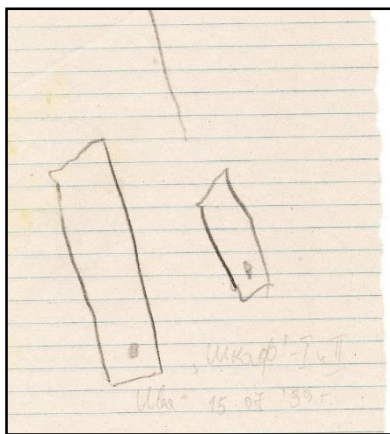


Figure 13. Drawing of a cupboard (b)

According to the Manova-Tomova (1974) methodology for grading children’s psychomotor development, the child should be able to draw a curved closed line at 30 months. This curved closed line can be achieved through one complicated circular movement of the hand under the control of the eyesight. Before succeeding in drawing a separate image of a curved closed line, children go through one stage called the “circle scribble stage”. Drawings during this stage look similar to those shown in Figures 14 and 15.

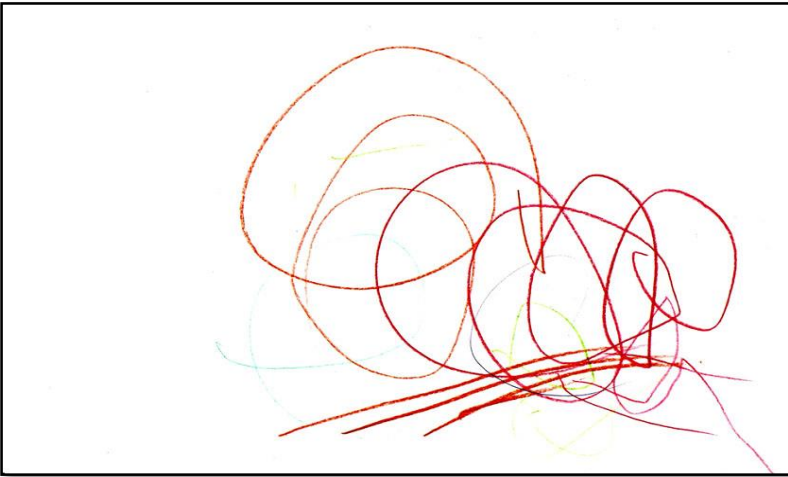


Figure 14. Circular scribbles of a child at the age of 30 months

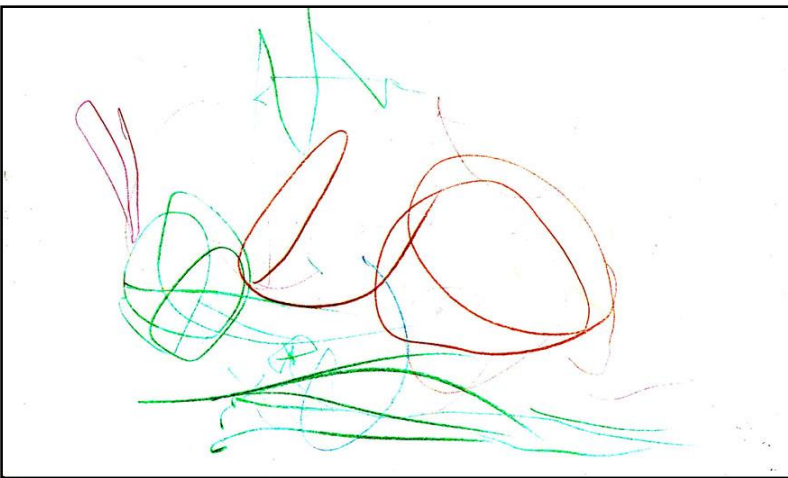


Figure 15. Circular scribbles of a child at the age of 30 months

Those circular movements of the hand are spontaneous and are considered to be a preparation for the complicated movement through which the beginning of the curved line connects to its end. The accuracy of this circle does not matter. The drawing in Figure 16 illustrates the curved closed line.

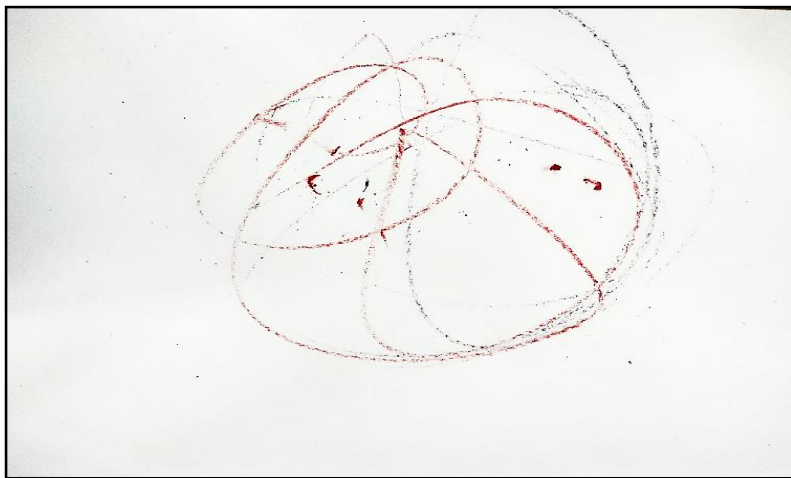


Figure 16. First attempts at drawing a closed curved line

The curved closed lines during the scribble stage are created with no preliminary intentions. However, when the child has finished scribbling, he or she can see a specific image in those spontaneously created curved lines. This is an extremely important and very characteristic sign for this stage: the child starts seeing a similarity between what he has drawn and familiar objects. Finding those accidental similarities is a significant stage which marks the first signs of interest in the art activity after the actual activity is over.

In order to find images in their own scribbles, children should first learn to understand the meaning of adults' drawings. They should be able to recognize illustrations in children's books. Ignatiev states that in his observations of children's art activities in their early attempts at drawing

(when approximately 18 months old) children "show that reading their drawing is possible only when the child has already learned to read other people's drawings". (Ignatiev, 1959, p.15) He also notes that the formation of an understanding of one's own picture goes from accidental recognition of any particular detail to a more or less complete disclosure of the meaning of the image.

At 30 months, there is still a lack of space orientation in the created circle scribbles and closed curved lines in the spontaneous scribbles of the child. Children are very likely to rotate the sheet of paper in different directions and place the scribbles and lines on top of each other without looking for any orientation in situating the scribbles on the sheet of paper.

Characteristic for the whole pre-representational period (scribble stage) is the children's lack of interest in space and its characteristics when creating the scribbles. Drawing, or scribbling to be more precise, is a spontaneous activity characteristic of the early development of the child during the toddler period.

When creating the different scribbles, the child is not interested in the space characteristics, even when accidentally creating a meaningful image. An important moment in mastering the space of the sheet of paper is placing the scribbles inside the sheet of paper, and the diligence of the child to differentiate the spontaneous art activity inside the sheet. The exceptional achievement in this stage regarding the comprehension of space in children's art activity is accepting the sheet of paper as a limited area on which they should then proceed to place their meaningful drawings.

At the end of the scribble stage children are able to depict closed circle lines as shown in Figure 17.

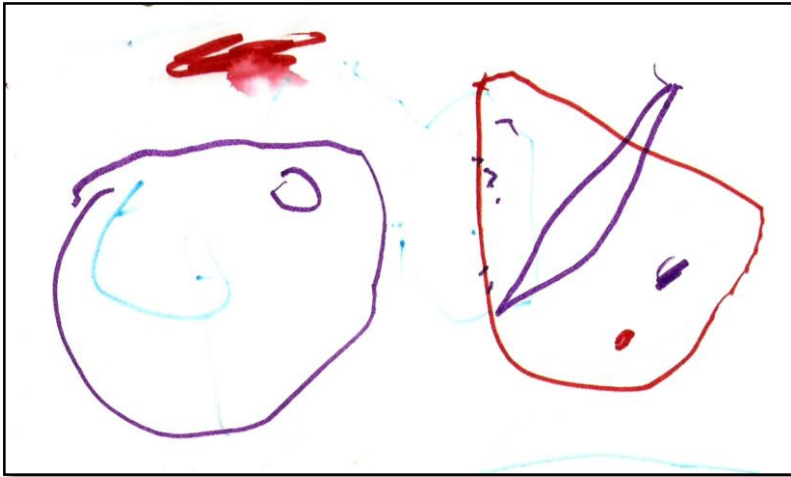


Figure 17. Drawing of a meaningful image placed inside the sheet of paper, at the end of the scribble stage

3.2 Representational drawing: the beginning of a conscious art activity (3-5 years)

At around three years, as children move on from the toddler stage, they also move on from the scribble stage in the development of their drawing. Most children with a normal development draw their first meaningful image at this time. The interesting thing is that this image is probably the most difficult thing to depict – the human figure. Children are not afraid to start with something which is seemingly so difficult in the eyes of adults. Moreover, this image is so schematic and generalized in the chaos of many other lines that it is sometimes difficult to notice it. The human figure has earned the name “tadpole figure” because the details children use to depict it are a head and legs. Figure 18 shows the isolated image of a tadpole figure. Figures 19, 20 and 21 show drawings with unorganized

composition, in which the children have spontaneously created their first image of a human figure.

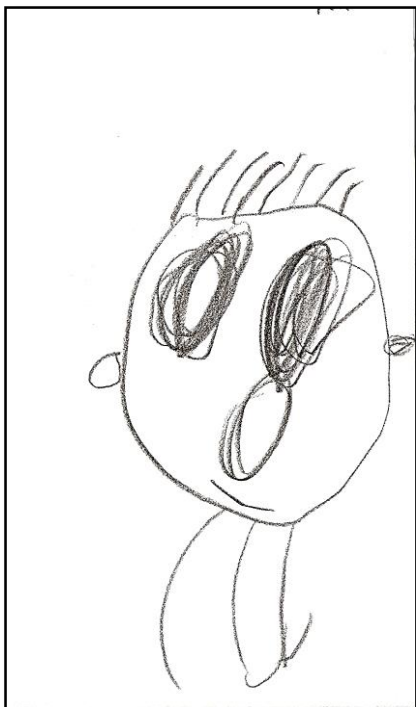


Figure 18. First attempt at drawing a “tadpole figure”

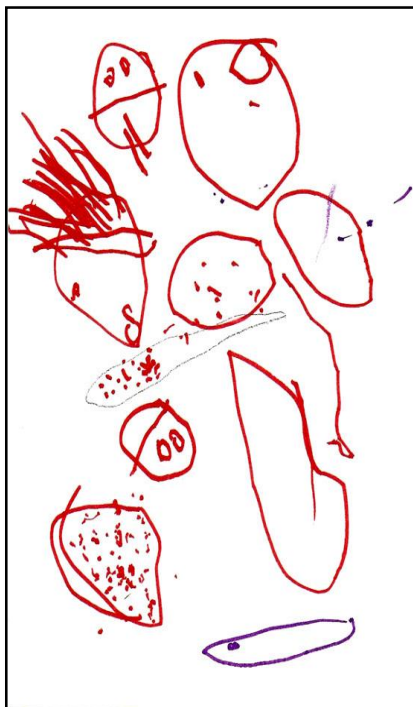


Figure 19. First attempt at drawing a “tadpole figure” along with other lines and circles

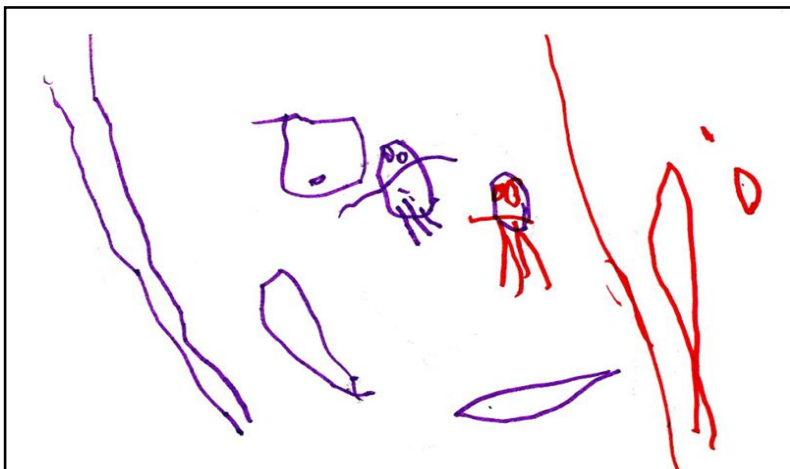


Figure 20: Unorganized drawing in which the child created a spontaneous image of a human figure along with other lines and circles



Figure 21. Unorganized drawing in which the child created a spontaneous image of a human figure along with other lines and circles

Around the age of four children who practice art activities on a regular basis, can create images that are quite different from their first art attempts. When drawing a person, a significant detail appears – the torso. This detail is evidence of the development of mature visual comprehension. Usually the torso in the drawing of a person with a simple geometric shape – triangle or trapeze, ellipse, or rectangle. Typically, the triangle and trapeze shapes are preferred by girls, supposedly because they are associated with the shape of a dress. Boys choose the ellipse or rectangle when depicting the human figure. They attach arms and legs which are connected to the torso. Usually the limbs are one-dimensional (drawn with only one line). Some more observant kids can try to depict fingers and toes, but these rarely look realistic. For the face details children often choose to depict the mouth and eyes. The eyes are marked with dots, and the mouth with a curved line. Some children make the attempt to draw hair using different types of scribbles. That way, the drawing of a person looks more like a real human (Figures 22, 23 and 24).



Figure 22. Drawing of a human figure with a torso and one-dimensional limbs, by T. around the age of four



Figure 23. Drawing of a human figure with a torso and two-dimensional limbs with fingers and toes, by N. around the age of four

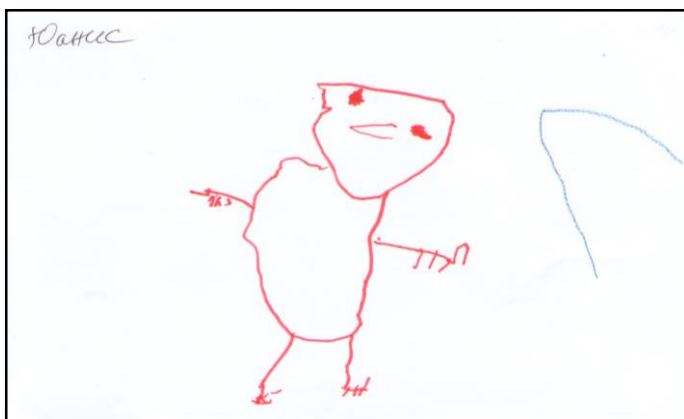


Figure 24. Drawing of a human figure with a torso and two-dimensional limbs with fingers and toes, by Y. around the age of four

Moreover, at this age, children often draw different images that have no compositional or thematic connection to each other on the same sheet of paper. In Figure 25 we can see that the child has drawn one of the figures on one side of the sheet, and then has turned the sheet in the opposite direction to draw another figure. After this, the child started drawing more figures but gave it all up for some reason or another.

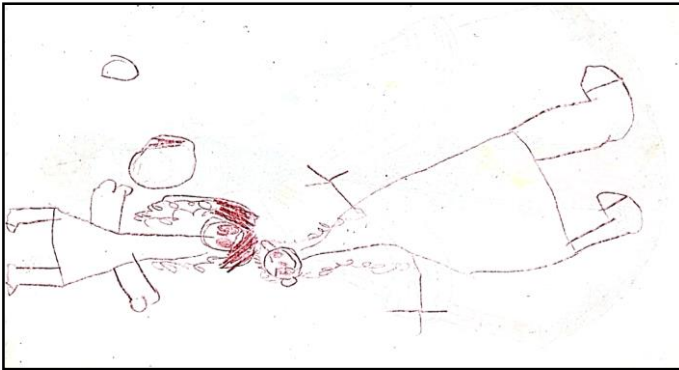


Figure 25. Images with no connection to each other, created on the same sheet of paper

At this age, apart from drawing human figures, some children try to depict other objects such as houses, trees, flowers: not every child can manage this task and, those who do, do not draw these objects all the time. The organisation of space and composition are still difficult for the child but we can see a tendency towards orientation of the sheet of paper in one direction.

As the child approaches five years of age, this period draws to an end. Children now start to place the images of different objects close to the edge of the sheet of paper and they think of it as the edge of the earth surface as can be seen in Figures 26 and 27. All the depicted objects step on this edge or are close to it. Thus, the drawing has the balance and stability which the child requires. In the specialised literature, this way of perceiving and depicting space is known as “frieze composition”. This is the age when it starts to make its first appearance in children’s drawings.

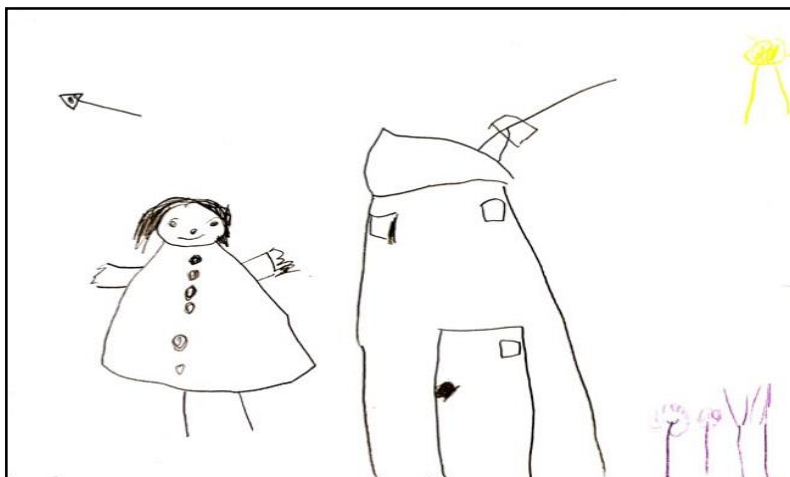


Figure 26. First attempt at placing objects and figures close to the edge of the sheet of paper



Figure 27. First attempt at organizing space - “frieze composition”

Displacing different images in the conditional spacing of the frieze composition and placing objects in the top, middle or bottom part of the sheet is a normal stage in the development of space relations between objects as can be seen in Figures 28 and 29. This is a natural tendency with children of this age when depicting space and it is connected with the child's desire to fill in the whole sheet of paper and to draw and include in the drawing all the objects previously decided upon. This tendency of placing objects at the "wrong" places relates to the natural regression in the evolution of the image, when children sometimes go back to drawing simpler images after they have already acquired ways for depicting more complicated ones.

Ignatiev (1959) defines this phenomenon as a manifestation of "pauses" in the development of children's drawings. These "pauses" or "regressions" in the development of the drawing can be explained as the technological time required to consolidate and rationalise the new knowledge.

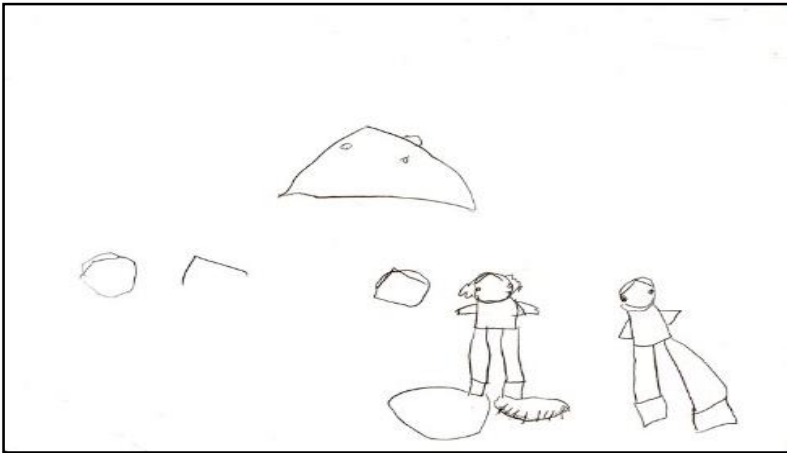


Figure 28. Displacing different images in the conditional spacing of the frieze composition



Figure 29. Displacing different images in the conditional spacing of the frieze composition

3.3 Symbolism (narrative drawing: 5-7 years)

This period in children's drawing is called "symbolism" since, during this stage of development, children often use art examples as symbols when depicting objects in their drawings. Kerschensteiner (1905) noted that, irrespective of their geographical affiliation, children had the tendency to depict objects in a similar way. Children's drawing at this stage is also called "narrative" because, through their drawing, children tell about events they have experienced. It is only through having the right knowledge of the drawing's specifics that one can guarantee the proper "reading" of this "narrative".

After the child turns five, we notice the quick enrichment of the drawings with new objects and their attempts to create narrative drawings in which the objects have a meaningful and compositional connection to each other. In their drawings, children with normal intellectual development and who feel happy and loved try to fill in the whole sheet of paper. This creates a feeling of balance and security about the environment in which children live as revealed in Figure 30.



Figure 30. Drawing of a child at the age of 5, with normal intellectual development, showing an attempt at filling in the whole sheet of paper with images

Drawings are filled with images which are typical for that period namely human figures, houses, trees, flowers, different animals, birds and butterflies, different type of vehicles – cars, trucks, bicycles and motor bicycles, planes etc. And other objects from children's surrounding world. The drawing becomes richer not only in the diversity of different objects but also in the colouring, with the characteristic hyperonisation of the colour of the object. Different objects are more accurately depicted and are positioned steadily at their places according to their location in height: flowers, trees, buildings, people, animals and vehicles are always portrayed on the surface of the earth at the bottom of the sheet of paper. Birds are depicted under the blue line of the sky or clouds and under them, at the level of the tree crowns, children usually draw butterflies or other insects.

Children aged five to seven can very accurately define the vertical space belonging to all the objects they depict. They rarely make mistakes by placing a certain object in a position different from the usual height section. Every familiar object has an exact positioning in this vertical distribution of images in the frieze composition as seen in Figure 31.



Figure 31. Drawing that shows an accurate vertical space definition in the sheet of paper

The frieze composition as a way of constructing the drawing is an exceptionally convenient way to transmit reality for children at this age. Through this composition they manage in a really good way to place different objects according to their vertical location on the sheet of paper. They are still not interested in their remoteness and the depth of the drawing. Placing objects in friezes creates a feeling of security, confidence and stability for the kids. Although depicting depth is still not of any interest to children at this age, they can clearly understand the meaning of the concept “close by” and “far away”. However, they do not try to depict it in any way, for example by dividing the surface of the paper using methods for showing depth. The paper is two-dimensional and the child is accepting this as a fact. If, for some reason, a child at that age would want to show greater distance between two objects, he or she would place them as far away from each other as possible – one on the left, and one on the right side of the sheet or, alternatively, the child would place a barrier between them.

Objects are depicted according to their corresponding functions. An example of this can be found in Figure 31: if there is a chimney in the

drawing, there is always smoke coming out of it, regardless of the fact that the sun is shining. What happens if, for some reason, the child cannot find the “correct” space belonging to a certain object? Children already find their own ways to correct such “mistakes”.

As has been mentioned above, people, trees, buildings and flowers should be placed close to the edge of the line marking the earth’s surface. Sometimes, some of these objects cannot reach this line for one reason or another. They can stay “in the air” in the middle of the sheet of paper. In such cases the child usually “lifts” the surface and places patches of earth underneath the feet of the human figures. Figures 32 and 33 are evidence of this. In children’s sensations, separating figures from the line showing the earth creates a feeling of instability, and placing earth beneath the figures can balance this instability. This technique can be seen in Figure 32 where earth has been lifted up to reach the feet of those figures who are “up the air”.



Figure 32. Drawing showing children’s tendency to “lift” the surface of the earth, so that the figures can touch it



Figure 33. Drawing showing children's tendency to "lift" the surface of the earth, so that the figures can touch it

Some children depict transparent objects, the so-called X-RAY seeing as described by Corrado Ricci and illustrated in his book *Art and Children* (Ricci, 1885). Examples of X-RAY seeing can be seen in Figures 34 and 35.



Figure 34. Example of X-RAY seeing
Source: Ricci, C., 1887, p. 24



Figure 35. Example of X-RAY seeing
Source: Ricci, C., 1887, p. 19

The reason for this transparency when depicting objects is rooted in the so-called “intellectualism” of children’s drawing. Vygotsky (1967) says that, in their drawings, children show what they know about the object and not what they see. This is the underlying reason why we can see both legs of the horseman in Figure 34 and the legs of the passengers on the boat in Figure 35.

The size of each object corresponds to the significance it has for the child – the most important object is the largest and the most detailed one. The size of the human figures is considerably larger than the size of the doors and sometimes bigger than the whole buildings. Some authors define this period as “anthropocentrism” because the human figure is central to the child’s interest. It is almost impossible to find a child who is in this age period whose drawing does not include a human figure. The figure is also one of the largest objects in the whole drawing. Figure 36 clearly shows that the woman is drawn exactly twice as large as the house on the left, and the figure on the right is the same size as the tree next to it.



Figure 36. Drawing showing that children at this age tend to draw the most important object as the biggest

Unlike the previous period, colour acquires a new and important meaning in children's drawings. At this stage it is very usual for children to use exaggerated saturation to depict the colour of the objects: grass is bright green, the sky is bright blue, the sun is bright yellow and the roofs of the houses are bright red.

The drawings of children aged between 5 and 7 who are confident, calm, have emotional stability and good self-esteem, are filled with a good and well-balanced composition. There is a stable space orientation, a lot of objects from the surrounding reality, and with enough details, depicted with a firm and confident line. For example, in Figure 36, the child depicted a heart close to the depiction of the house as a symbol of love and affection.

3.4 Tendency to depict objects realistically (Realism - 7-14 years)

Upon turning seven, children embark on a new stage in their development. When children start attending school their whole life changes. Studying and all the obligations that go with it become the main focus in their lives. The process of development of the main human characteristics - conception, attention, memory, imagination – starts at the beginning of the school age. As a result of new combinations of the elements of these cognitive processes, productive images start appearing in the drawings of children at the age of 7-8. The development of these images is probably connected to the beginning of school education. To a great degree, mastering written speech in the primary school period takes the place of art activities. The new symbolic language of letters becomes more convenient and turns into an easily applicable method to express thoughts, feelings and desires. Although drawing continues to be a favourite activity for kids, the knowledge and abilities they acquire through the educational process in other areas engage their time and attention. Another reason why children retreat from art activities which was one of the main activities in their lives up to the age of seven is technology. Various television shows, and computer games and activities

engage their time and attention, depriving them of their interest and inspiration in art activity in the process. Art classes become the main time for art occupations. In the context of adequate knowledge about the development of children's drawing, the techniques and methodical ways of teaching art can guarantee keeping children's interest in art and their accomplishment in this interest in primary school. In the first educational stages, children have some difficulty determining their personal interests.

The cognitive processes have different levels of development:

- An observation stance quickly forms in the school education system;
- Memory in primary school age becomes more organised. Processes for memorizing new information begin to become more elaborate.
- Children build their reasoning based on different signs, mostly concrete. They are still not able to logically prove their conclusions and rely on visually-action thinking.

Later during this period, they master conceptions such as classification although they still judge objects based on the way they look. They are able to combine the different parts of objects. That way children gradually develop abstract thinking. According to Piaget the age between 7 and 11 coincides with the stage of forming specific operations – operational thinking about objects which can be intuitively comprehended. “At 7-8 years of age,” according to Piaget (1969), “children form quality operations that help them structure space: order of space continuity and the included intervals and distances, memorizing length, surfaces and so on, building a coordinate system, perspective for example” (p. 199).

Biene (1899) also divides this period into two phases: from 7 to 10 years when children's drawings have a narrative character and a lot of details; and after the age of 10 when children's drawings are well thought through.

In the development of children's drawing we can see one significant paradox when the “more complicated” drawing from memory appears before the “much simpler” drawing from nature. For most children of primary school age, it is difficult to overcome this barrier connected with

switching from the more complicated to the much simpler way of drawing. This paradox is explained by Bakushinski (1981) and Vygotsky (1969) with the transition in the development of the child from motor-sense-of-touch conception to the visual conception of the world.

Read (1974) defines the stage of children's drawing at the age of 7-8 as "describing realism". He thinks that, at this stage, children still continue to draw what they know about an object and not what they see. They aim to express everything they remember about the subject of the drawing. The child attempts to depict human faces in profile but this task is still quite difficult to achieve. These difficulties are caused by the fact that the child still has no knowledge of the laws of light-and-shadow and perspective building of the image.

According to Ignatiev (1959), the functional maturity of the muscles is still quite weak in children aged between 7 and 8 years. In fact, at this age, children have weakly developed muscles of the thumb and index finger. They are still unable to conduct the fine movements of the hand which inevitably results in a great number of inaccuracies and unnecessary movements. In the drawing process children make a lot of mistakes mostly when showing the contours of the objects because the hand does not always "submit" to them. At pre-school and during the first and second grade, children usually begin their composition by drawing the contour line of the object and they don't go back to correcting this line in the process. According to Ignatiev (1959), at this first stage of development of the art activity at school age, children are still unwilling to correct the mistakes they make in their drawings: in fact, they tend to do this very rarely. His research revealed that the method 7-9 year olds adopt to correct drawings "is simply by starting the drawing on a clean sheet of paper. Perfecting images in this period is associated with adding more and more details. The students in the first and second grade start to draw a particular theme or subject, they quickly change the plot and subject of the images thus changing the meaning of their drawings very easily" (Ignatiev, 1959 p. 96). Overall, children at this stage continue to be more enthusiastic about the process of drawing the image than following the task and creating certain thematic drawings. Ignatiev (1959) calls this first period in primary school drawings "the period of narrative

image” (p. 96). The drawing during this stage is a graphic story. According to Ignatiev, the drawings of 7-9 year olds rarely show one object covering parts of another object. He explains this characteristic in showing space relations between objects with the fact that children try to tell as much as possible about the object on the image and, in order to do this, they end up drawing very detailed objects.

Another specific feature at this age is the lack of a fixed point of view: children in the first and second grade sometimes still draw houses with transparent walls and include multiple story episodes in one drawing (Ignatiev, 1959). Another characteristic, according to Ignatiev, is the fact that children still do not define objects as difficult or easy to draw. He says they are interested in the “what” rather than in the “how” something is drawn.

Objects in children’s drawings at primary school age are becoming more complicated as a form: they are more detailed and particular. Human figures are not as static as they used to be in the pre-school period. More complicated postures begin to appear, the first profile images develop and children make an attempt at depicting different movements of the human figure as can be seen in the example in Figure 37.



Figure 37. A detailed drawing of human figures by a child at the age of 7

The human figure is still quite attractive for children and they often include it in their drawings but, with the development of a critical self-esteem, there are drawings from this period where it is not present as shown in Figure 41. In the image of a human figure we can see an attempt to depict the object as similar as possible to the real one and, with the passing of time, this striving gets stronger (Figures 39 and 40). During this period, children draw the different parts of the human body more proportionally: head, body, arms and legs seem to correspond more with the actual proportions of the human body. When children draw facial details we see a significant match with their real shape and they place each detail in its respective place. Eyes are depicted as a shape and, according to their power of observation, some children even draw details such as an iris, pupil, eyelids, eyelashes and eyebrows. While the nose was rarely present in the drawings of children during the previous period, it is now drawn as a two-dimensional image mostly as a curved line or a sharp-edged line. Some children even include nostrils. Lips are also depicted two-dimensionally and they are mostly separated as lower and upper lip.

For other human body parts children usually look for maximum similarity with the real objects: hands are depicted with wrists and fingers (usually 5); there are feet with shoes; and, sometimes, they draw folds to represent joints. Hair is drawn in different styles and, sometimes, children also include accessories like hair-clips and flowers. Clothes correspond to the sex of the figure, the season and the whole plan of the drawing.

The drawing in Figure 38 depicts female figures in traditional clothes taking part in a folklore festival. The female figures clearly reveal the children's tendency for realistic representation: the right proportion of the bodies; the detailed depiction of the body parts; the facial features and the face proportion; and the clothes drawn in a very realistic design.

Figure 39 also shows the same tendencies of realistic depiction of the human body: the members of the family are presented in the same tendency of realistic depiction of all the parts of the body, proportion and clothes.



Figure 38. Realistic representation of female figures in traditional clothes taking part in a folklore festival



Figure 39. Realistic depiction of the child's family members

The frieze composition as a way of depicting space remains present for a long time in children's drawings. It can be said that, to a large degree, it is typical and emblematic of children's drawings. Although it is not the only way of depicting space, for many children it is the only safe way of showing space relations between objects in reality. Figure 40 is a fine example of this.

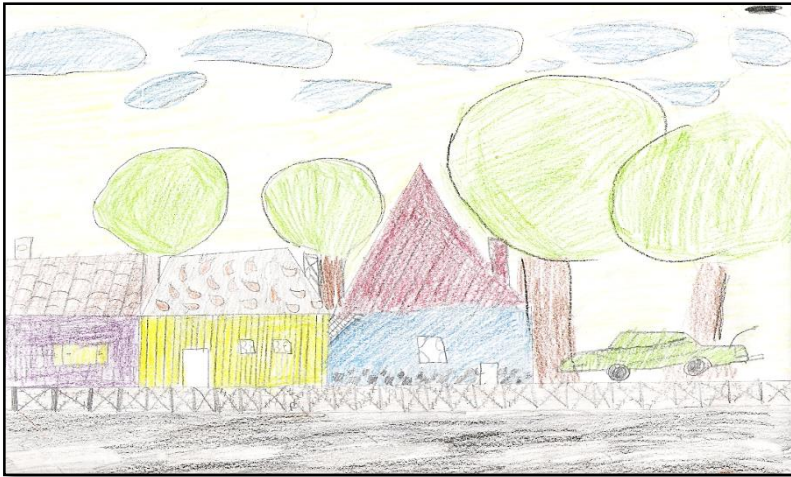


Figure 40. “Frieze composition” used to show space relations between objects in reality

When it comes to the size of the depicted objects there is definitely an attempt to scale objects realistically. In the drawing in Figure 41 we can clearly see the child has tried to match the size of the house and the human figures. This drawing also brings out the significant progress in the attempt to represent space relations by placing separate objects lower or higher in the sheet of paper in the effort to represent the distance between them. For example, human figures which are lower are perceived as being closer to the viewer. In the background we can see a house which is drawn in perspective, albeit in a reverse perspective, and the remoteness of the tree is depicted with its high position on the sheet of paper.



Figure 41. Drawing showing the child's attempt at matching the size of the human figures with the building

Figures 42 and 43 display another way of showing space in the drawings of 7-8 year olds. In these drawings space is represented as a sequence of different layers in height. Every layer includes different images or, in other words, a combination of a sequence of friezes. A similar method for depicting space could be defined as multilayered strip composition.

The drawing in Figure 42, for example, is something like a vertical cut through reality. In the bottom section we can see a frieze showing underwater creatures: fish, jellyfish, dolphins and water plants. The layer above it shows a beach with people, umbrellas and sand castles. In the next layer, we can see a street with cars, and in the last frieze at the top of the drawing, we can see the sun, clouds and birds. If we take a closer look we can see that all the objects, except the umbrella, are depicted as flat images. In spite of that, because of the sequence of the different layers and the clear division the street creates between the sky and the beach, the drawing gives the illusion of being three-dimensional.



Figure 42. Drawing showing a composition in which the child layered a sequence of friezes

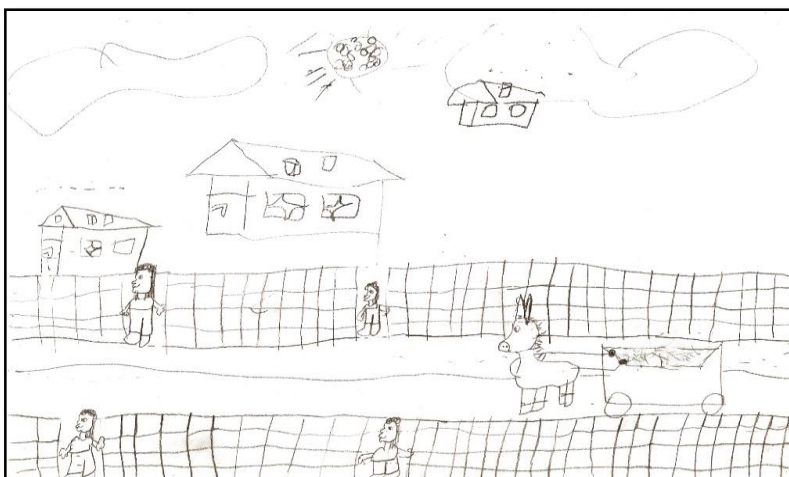


Figure 43. Drawing showing a composition in which the child layered a sequence of friezes

Even though the plot is different, the method of representing space in the drawing in Figure 43 is similar to the previous one. Here, we can also see a sequence of friezes with different characters. The bottom layer is a sidewalk with square tiles depicted as if it is being seen from above. On the sidewalk, there are people walking but they are depicted in profile as if we are seeing them from one side. In the next frieze there are three houses that the child arranged in line and drew them as if they were farther away in space. What is interesting about those houses is that, unlike the other objects in this drawing which are represented as flat images, they are shown in perspective. The lack of a line which marks the horizon is the reason why those houses seem to be floating around in space. In the last frieze we can see the traditional clouds and the sun. Putting a line between the last two layers that represents the horizon creates a feeling of a third dimension for the viewer.

Another way that children of this age use to represent the third dimension is mixing different points of view in one single drawing. Children try to show the illusion of space depicting objects not from one but from several points of view. With these attempts they choose the point of view that shows the most characteristic form of the objects. The depth of space is quite often represented with one specific “flip” of the surface and it is shown as if seen from above. In this way the child subconsciously aims to reflect space changes that he or she has the mature perceptions to notice but still lacks the knowledge and skills required to represent them. Children use as many points of view as needed to show the object from the side which is simplest to perceive. Often this way of depicting space is compared with a topographic system or “a bird's eye view”. Obviously, the image schemes connected with the relation to the object, and not with the way it looks, are at the basis of visual concepts.

The drawings in Figures 44 and 45 are a good illustration of this approach of depicting space. We can clearly see that the points of view chosen for people are different from those chosen for the furniture. Human figures are drawn as if seen frontally (perhaps except for the female figure form doing gymnastics in Figure 44) while the furniture, plates, as well as the floor are drawn as if seen from above.



Figure 44. Composition showing a mixture of different points of view in one single drawing



Figure 45. Composition showing a mixture of two- and three-dimensional objects

Another way of depicting the third dimension which remains very popular is the space building of reality: the different sections of the space are shown as flat and children include one or several objects drawn in perspective. The drawing in Figure 46 shows the obvious evidence of perspective in the building and the stalls and the relatively flat human figures.

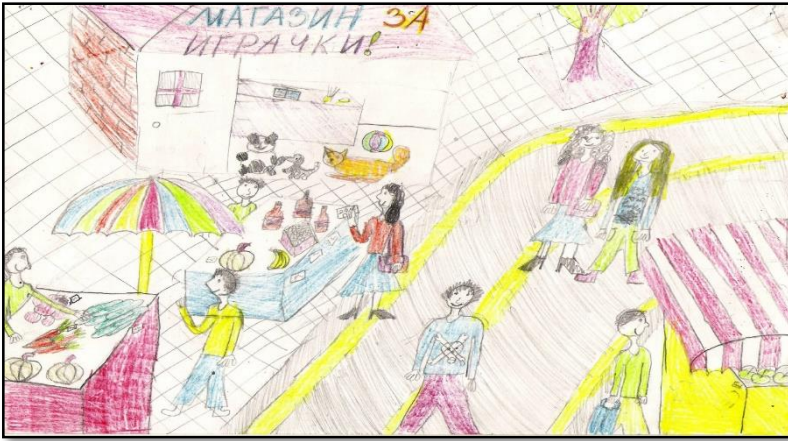


Figure 46. Drawing showing buildings drawn in perspective and relatively flat human figures

The examples shown in Figures 47 to 50 distinctly show that, when drawing cubical objects, children easily perceive and depict space changes and perspective laws. The other reason to start drawing cubical objects in a three dimensional way is the possibility to use a linear perspective in their depiction. In his explanation of perceptions, Gregory says that first in brain the information about border regions of the object comes. (Gregory, 1966) That can to explain way children always start to draw the objects with contours and way this is so important in their perception and in their depictions. In this way of thinking we can conclude that for children it is easier to start perspective depiction of cubical objects because there they can use only lines for their three-dimensional depiction. For spherical, conical or cylindrical objects,

where they need light-shadow effects to depict the volume, children would need a deeper understanding of perspective and should be taught how to do this.

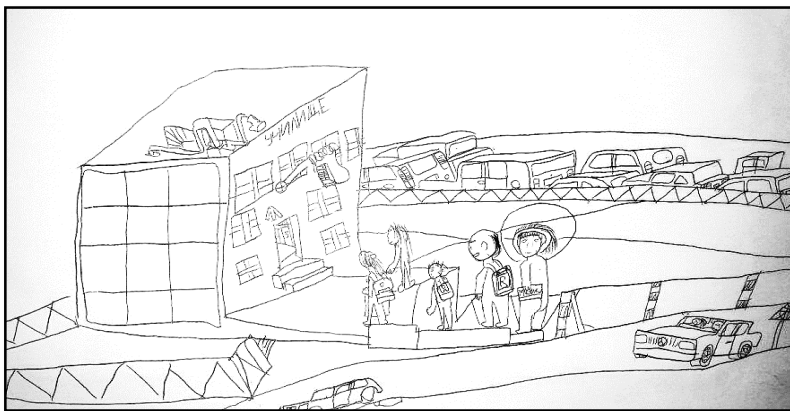


Figure 47. Composition showing the child's ability to recreate cubical objects in perspective



Figure 48. Composition showing the child's ability to recreate cubical objects in perspective



Figure 49. Composition showing the child's ability to recreate cubical objects in perspective



Figure 50. Composition showing the child's ability to recreate cubical objects in perspective

When 11-to 14-year-old children are acquainted with the laws and main geometric rules of showing space changes with linear perspective, one can expect children to think through the peculiarities of those perceptions and the ways of depicting them on the sheet of paper. In art classes, the more children are given explanations about the changes of objects and space, the more they will try to reflect those changes in their drawings. Children assimilate the knowledge about the line of the horizon and the peculiarities of the perceived objects according to their position in relation to this line. At this age (11-14 years) it is extremely important for children to be able to determine the location of a certain object vis-a-vis the line of the horizon – under the horizon, on the horizon or above the horizon. They can also be enabled to describe the changes we see in the object in all of these positions. The natural tendency for drawing cubic objects in reverse perspective and axonometric projection should be encouraged. Children should be taught the law for parallel non-frontal lines gathering in one dot located on the horizon line. That way the tendency to “gather” those lines will gradually replace the used methods with reverse perspective and axonometry. Developing a separate image as a detailed work and also as a space projection, and creating the drawing as a whole three-dimensional illusion, could not happen without a purposeful and professional support in the art activity of children at this age. Figure 51 illustrates all the above.

In his study of the development of perspective in children's drawings, Goncharov (2009) indicates the results of dominance of spatial constructions in the reversible perspective in preschool and primary school age. He notes that in the secondary school age a gradual transmission to constructions made in parallel (axonometric projection) and linear perspective. (Goncharov, 2008). In his opinion the reverse perspective cannot be considered only as a design flaw. "At a certain stage of development, she naturally reflects the features of spatial perception." (Goncharov, 2009, p.14). On the other way in his experiments he detected close connection from Perceptual constancy and revers and axonometric (parallel) way of presenting of perspective in children's drawing. "The perceptual basis of promising constructions is the mechanism constancy of perception of magnitude. Hyperconstant perception reinforces the

tendency to reverse perspective, and constant perception - to linear." (Goncharov, 2009, p.14)

To a great extent, the increase of knowledge and literacy in the field of fine arts deprive the drawing from the spontaneity and authenticity typical of the early stages of its development. As children grow up, their spontaneity in showing their emotions in their drawings diminishes. The more mature, literate and aware of the means of expression, space and proportional relations between objects children are, the less spontaneous and authentic their drawing is.

After turning 13 or 14, a significant number of children lose interest in drawing which used to be their favourite and preferred childhood activity and never return to it again.

Yet, for a good number of children, drawing after the age of 13-14 may still remain a pleasurable activity with which they gladly occupy themselves under the guidance of an experienced art teacher, without turning it into a dominant interest and, definitely, without a willingness to make a career out of it.



Figure 51. Drawings showing the tendency to gather non-frontal lines in a single dot, by 13-14 year old children who have been taught the basics of perspective

For other children with a keen interest and talent, drawing and art activities in general become a conscious choice for future professional development. They devote a lot of energy and time into it - as the samples in Figure 52 show - with the desire to continue to develop their talent and skills. They move on and build careers in architecture, illustration, design and art.



Figure 52. Drawings by children who are keen on continuing to develop their drawing skills and talent

Chapter 4. Basic Principles in the Diagnosis of Children's Drawing Diagnostic Drawing Tests.

In this chapter I try to share my opinion on the possibilities and opportunities of using drawing tests as a diagnostic tool with children. One of the main reasons to use drawing tests is that they are a simple way to carry out a study while providing a wide range of metrics. The chapter presents the most popular drawing tests: The Draw-a-Person test (DAP) Goodenough methodology; The Draw-a-Person-test (DAP) Machover, methodology; The Kinetic Family Drawing technique (KFD) and The Kinetic School Drawing technique (KSD). You can find the brief version of these tests in concise form.

4.1 Why should we use drawing tests as a diagnostic tool with children?

A number of researchers in psychology, art and pedagogy (including Goodenough (1926), Machover (1949) Ricci (1887), and Piaget (1969)) found a close relation between children's specific way of drawing and their personality, in both their practice and studies. According to some researchers, analysing children's drawings can be a very powerful technique for evaluating children's experiences, their perception of the world and their environment. Assessing children through their drawing has various benefits. Goodenough and Piaget connect the level of development of images in a child's drawings with his or her cognitive development. For Machover, Ricci, Burns, and Kaufman, children's drawings are more reliable as a tool for measuring their emotional and psychological experiences. Research has shown that assessing and analysing children's drawings can be a very powerful technique to access children's experiences and their perception of the world and their environment. Assessing children through their drawing has various benefits:

- Drawing tests are a simple way to carry out a study. At the same time, they give a wide range of metrics.
- They are convenient to use and do not require complicated methodology.
- For a child drawing is a spontaneous and natural activity. It has a relaxing effect and helps to reduce the tension that usually occurs in psycho-diagnostic studies.
- They are a convenient tool to use with pre-school children because of the substantial limitation of the use of verbal diagnostic tools.
- Drawing is one of the best ways to learn about some aspects of a child's personality. However, diagnosis requires professional training and not a mastery of art techniques: "freedom of expression" and "art therapy translation" constitute the most important part.

One example of the latter benefit is that of a five-year old child whose parents only got to know about her rape by a priest, not because she had expressed it verbally, but when they discovered her harrowing sketches showing how he had abused her. The priest was subsequently charged with rape. This was shockingly reported in the *The Sun* (October 19, 2016) (Figure 53).

PRIEST ARRESTED FOR RAPING GIRL, 5, AFTER PARENTS FOUND HER HARROWING SKETCHES 'SHOWING HOW HE ABUSED HER'.

A priest who allegedly sexually abused a five-year-old girl was caught when her parents found horrific drawings the young girl had created seemingly depicting the sex attacks.

Father Joao da Silva, 54, is accused of launching the horrifying attacks on the girl - who was a student in a class he taught.

The girl's parents found the shocking images after their daughter suddenly refused to attend da Silva's English classes any more.

She was so distraught that they took her to a child psychologist who suspected sexual abuse and urged her parents to search her room for any signs.

The parents eventually found these "signs" in the harrowing images of her ordeal at the hands of the priest which the child had drawn.

Figure 53. Article about a priest arrested for raping a girl

In her drawings, reproduced in Figures 54 and 55, the girl clearly shows what had happened to her.



Figure 54. Drawing illustrating a horrifying attack on a five-year-old girl

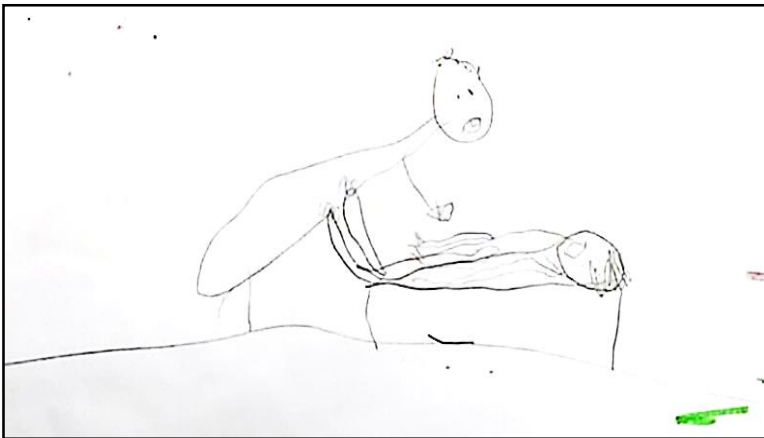


Figure 55. Drawing illustrating a horrifying attack on a five-year-old girl

These pictures are a very convincing example of the necessity and importance of acquiring the ability to read children's drawings and to be able to properly interpret what a child is trying to say.

4.2 The most popular drawing tests

There are a lot of psychological tests which seek to assess personal development. The Institute of Medicine in Washington presents

many facets to the categorization of psychological tests, and even more if one includes educationally oriented tests; indeed, it is often difficult to differentiate many kinds of tests as purely psychological tests as opposed to educational tests. The ensuing discussion lays out some of the distinctions among such tests; however, it is important to note that there is no one correct cataloging of the types of tests because the different categorizations often overlap. Psychological tests can be categorized by the very nature of the behavior they assess (what they measure), their administration, their scoring, and how they are used. (Institute of Medicine, 2015, p. 122)

Drawing tests were one of the 24 commonly used types of psychometric tests as reported by 151 clinical psychologists in Ball, Archer and Imhof (1994). The drawing tests which were ranked at the top were "Draw-a-Human" and "House-Tree-Person" which occupied 8th and 9th place respectively, and the "Kinetic-Family-Drawing" test which placed in the 12th position. The ranking of the "Longest to Score" for the different tests were the following: 8.55 minutes for the "Kinetic-Family-Drawing" test; 9.82 minutes for the "Draw-a-Human" test; and 11.75 minutes for the "House-Tree-Person" test. It can therefore be concluded that the three most widely used drawing tests are:

- the Draw-A-Person test
- the House-Tree-Person test
- the Kinetic Family Drawing test

4.2.1 The Draw-a-Person test (DAP) Goodenough methodology

The Draw-A-Person (DAP) test was originally developed by Florence Goodenough in 1926. This test was first known as the Goodenough Draw-a-Man test. Goodenough first became interested in figure drawing when she wanted to find a way to supplement the Stanford-Binet intelligence test with a nonverbal measure.

In 1926, she published a booklet called “Measurement of Intelligence by Drawings” which described the DAP Test. Although the test only took a few minutes, Goodenough argued that it provided a window into the child’s mind, and that “the nature and content of children’s drawings are dependent primarily upon intellectual development” (p. 14). She argued that those scrawls and scribbles were not meaningless marks but they reflected something fundamental about the ways in which children made sense of the world. The act of expression was an act of intelligence and should be treated as such (Lehner, 2014, p. 4).

Early research on children’s drawings began with an emphasis on their use in determining intelligence level. Goodenough (1926) and later, Harris (1963), explored age norms for human figure drawings, relating drawings to mental age rather than chronological age. Goodenough (1926) developed what she initially referred to as the Draw-A-Man (DAM) test based on the assumption that certain aspects of drawing performance correlate to a child’s mental age and these could therefore be used as a measure of intelligence. The subject of a man and not a house was chosen because of its universality and preference among children: a drawing of a house was thought to have more variability across cultures. Goodenough considered various aspects of the drawing: the number of details, correct proportions between body parts, and motor coordination as demonstrated by the fluency of lines and integration of parts.

Goodenough also observed that the DAM test revealed personality traits in addition to intelligence; this supposition was later defended by the work of Buck (1948) and Machover (1949) among others. In working with children, the human figure drawing continued to be popular and it was the subject of many projective drawing studies during the first half of the 20th century. The intuitive consensus became that children’s

drawings of humans provided important information about themselves and about their perceptions of other people (Malchiodi, 1998).

Although the idea of measuring intelligence through drawings was not novel, nobody had used advanced quantitative analysis to examine the results and offer technical qualities of the instrument. The use of drawings was not the only characteristic that set it apart from other IQ measures of the era. The simplicity of the test was innovative and appealed to young children since it consisted of a child's single drawing. Moreover, the test took only 10 minutes to administer and 2 minutes to score and was recommended for children between 4 and 10 years of age. The reliability coefficient was reported at .80–.90 and the correlation coefficient to the Stanford-Binet was .76. (Jolly, 2010).

Although it did not provide the same holistic measure of intelligence as the Stanford-Binet, the DAM Test can be useful for initial classifications. The nonverbal nature of the test set it apart from other intelligence measures of the time and would have great utility with children who had a hearing impairment and those from non-English speaking and immigrant homes (Goodenough, 1926a, 1926b). The DAM Test was regularly adopted by clinicians and was cited as the third most used clinical instrument in 1940 (Jolly, 2010).

Test Drawing of a Person: Administering the DAP (Goodenough Methodology)

The following is an adapted version which is very similar to the original Goodenough test. Children are given a sheet of paper and a pencil. They are given the following instruction: "Draw the whole body of a human. Try to create the best drawing." No time limit is set but generally 10 to 20 minutes are enough for the children

Analysing the results

To evaluate intelligence, the test administrator uses the DAP: QSS (quantitative scoring system). This system analyses 14 different aspects of the drawings (such as specific body parts and clothing) for various criteria, including presence or absence, detail, and proportion.

Goodenough's original scale had 46 scoring items for each drawing, with 5 bonus items for drawings in profile. The system presented below is one of the most popular variants of the test used in contemporary practice and it has 50 points. Every position has to be evaluated with one point. Every detail has to be evaluated depending on the level of exactness of depiction of it. This means that, for one body part, one can give a range from 0 to 5 points. For example, 0 points are given if the body part is not depicted at all and 5 points are given if the child has drawn a very realistic image of the body part. It is crucial that the evaluation is very strict.

Evaluation:

1. Head: Every image of a head that is clear enough counts, the shape does not matter. (Face features that are outside the contours of the head, can signify a problem.)
2. Legs: Every image of one or two legs.
3. Arms: Every image of arms.
4. Body: Every image of a body in one or two dimensions.
5. The body should be two-dimensional. The length of the body should be bigger than its width.
6. In the upper part of the body there are the shoulders, not as a part of a geometric shape (square, triangle, circle or an ellipse)
7. The arms and legs are connected to the body. (Connected in every point of the body or neck (for the arms) counts. If there is no body – 0 points. If the legs are connected with something else, not the body – 0 points, regardless of the way the arms are connected.)
8. Arms and legs are connected to the body at the right places.
9. Neck: Every clearly distinctive image of a neck, different from the body and head.
10. The neck is two-dimensional. The contours of the neck are continuing the lines of the head, the body or one of the two. It does not count if the neck is depicted as one single line.
11. Eyes: Every form of depicting, even just a line or a dot.

12. Nose: Every image of a nose.
13. Mouth: Every image of a mouth.
14. Two-dimensional nose and mouth. In frontal view clearly outlined upper and lower lip and a nose. In profile there is a relief of lips and nose.
15. Nostrils. Every image of nostrils.
16. Hair: Every image of a strand of hair, even the most primitive one counts.
17. Hair outside the outlines of the head, non-transparent, drawn better than scribbles.
18. Clothing: Every image of clothing.
19. At least two non-transparent elements of clothing or an accessory, that cover part of the body – a hat, pants etc. If the hat only touches the head and does not cover a part of it – it does not count. Buttons drawn alone without any link to other elements of clothing also do not count.
20. All elements of clothing are non-transparent. Sleeves and trouser legs are distinct from the wrists and feet.
21. At least four elements of clothing are present. (Clothing can include shoes, coat, jacket, shirt, collar, tie, bowtie, tyrants, belt, pants, skirt, dress, t-shirt, pyjamas, socks, pockets)
22. A complete costume, without incongruities. This could be a uniform – military, cowboy, sportswear, fashion outfit, theatre or a ballet outfit. This point is encouraging and it is given only if the previous point is also true.
23. Fingers: Every image of fingers.
24. Depicted the right number of fingers. When both hands are depicted they should both have five fingers, except if something is covering them.
25. Underlining the thumb. Fingers are drawn in a way where the thumb is distinguishable from the rest of the fingers. This point is strictly

evaluated. If the hand is drawn like a glove with one finger it does not count.

26. Two-dimensional fingers whose length is greater than their width, and the angle between the first and last finger is not wider than 180 degrees.
27. Wrist distinguishable from the fingers and/or the part of the arm above the wrist.
28. Depicted joint in the arm: elbow, shoulder or both. Should be shown clearly with a logical curve.
29. Depicted joint in the leg: knees, femoral or both should be distinguishable and logical curve.
30. Proportional head: the size of the head should be from $\frac{1}{2}$ up to $\frac{1}{10}$ of the area of the body.
31. Proportional arms: arms are as long as the body or longer, but do not reach the knees.
32. Proportional legs: the length of the legs is not smaller than the vertical size of the body and should not be more than twice as long as the body. The width of every leg should be smaller than the width of the body.
33. Proportional feet: the length of the feet should be greater than their height. The length of the feet should not be greater than $\frac{1}{3}$ and not smaller than $\frac{1}{10}$ of the length of the legs. (An attempt to show at least one foot in perspective. Any type of detail like shoelaces, leashes, tongues, double lines is also an advantage.)
34. Depicted two-dimensional arms and legs.
35. Depicted heel: every attempt to draw a heel counts.
36. Motoric coordination when depicting lines: long lines in the arms, legs and the body should be confident and with no accidental curves. (If the lines show good and confident work with the pencil a point should be given, even if the drawing is not good.)

37. Motoric coordination when drawing the connections between the lines: in the places where lines meet they should meet precisely, without any crossovers, overlays and interruptions.
38. Contour of the head: the contour of the head should be drawn with one single line, without random deviations. A point is given only to these drawings in which the shape is achieved without wrong preliminary attempts. In the drawings in profile – an ellipse with an attached nose does not count. The contour of the face should be drawn with one single line, and not with connected parts.
39. Contour of the body: the body should be drawn without irregularities: it should be better than a primitive circle or an ellipse.
40. Quality of the lines when drawing the arms and legs: arms and legs should be drawn with no shape abnormalities, as in the previous position, without a tendency of shrinking in the places where they are being connected with the body. Arms and legs should be two-dimensional.
41. Quality of the lines when drawing the face: face features should be symmetrical. Eyes, nose and mouth should be drawn two-dimensionally. In frontal view face features should be placed in their exact places and should clearly represent a human face. In profile the contour of the eye should be correct and placed in the front part of the head. The angle between the nose and forehead should be bigger than 90 degrees. Geometric or a “cartoon” nose does not count.
42. Ears: every image of ears counts.
43. Ears: proportion and placement. The vertical size of the ears should be bigger than the horizontal. Their placement should be approximately in the middle third of the skull. In frontal view the upper part of the ears should go out of the skull. Ears should get wider on the sides. In profile there should be some detail, for example, the auditory canal or the incisors of the ear shell have been noted. The ear shell extends sideways towards the neck.
44. Eye detail: depicted eyebrows and eyelashes.
45. Eye: visible pupil.

46. Eye proportions: the horizontal size of the eyes should exceed their vertical size. When drawing a face in profile, every triangle shape counts.
47. Eye gaze: in frontal view the eyes are watching in some direction. There should not be collection or distraction in the pupils vertically or horizontally. When drawing an eye in profile, the iris and pupil should be in the front part, and not in the middle.
48. Chin and forehead: in frontal view there should be two eyes and a mouth and enough place above the eyes and under the mouth, where the chin and forehead are placed. The chin should be separated from the lower lip.
49. Figure in profile: a figure in profile should have no more than one mistake (for example body transparency, legs not in profile, arms attached to the back and so on).
50. A figure in real profile: a figure in real profile should be without a mistake or transparency. The body, the head, and legs are in profile without a mistake.

Table I. Table of results and equivalent mental age

Results and equivalent mental age												
Points	2	6	10	12	14	18	22	26	30	34	38	42
Mental age	3	4	5	5,5	6	7	8	9	10	11	12	13

The difference between the mental age and calendar age is used to calculate the IQ. For this calculation one can use the following formula:

MA/CA x100=IQ (Mental Age/Calendar Age x 100 = Intelligence Quotient)

**Table II: Current Wechsler (WAIS–IV, WPPSI–IV)
IQ classification**

IQ score	IQ classification
130 and above	Very Superior
120–129	Superior
109–119	High Average
90–109	Average
80–89	Low Average
70–79	Borderline
69 and below	Extremely Low



**Figure 56. Drawing by a child with a
superior IQ score
(MA: 11,5/ CA 9 x100 = 127,77)**

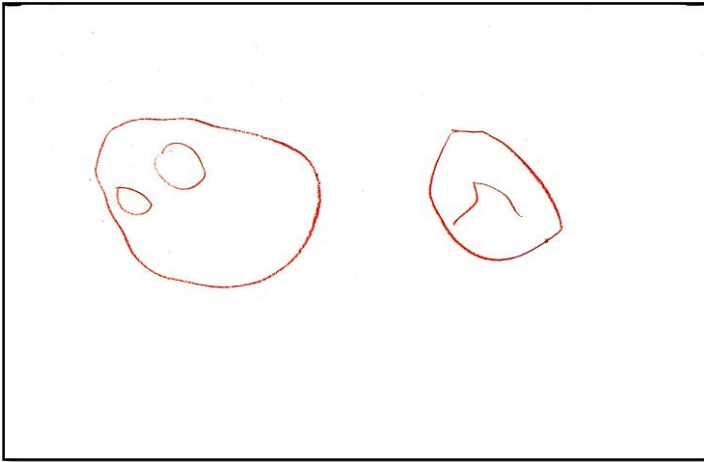


Figure 57. Drawing by a child with an extremely low score (MA: 3/ CA 9 x 100 = 33.33)

Figures 56 and 57 show two drawings each of which is at the opposite extreme end of the classification range.

4.2.1.1 Limitations of the DAP test

A good number of authors and professionals in the psychology and educational areas suggest that the DAP test has limited usage. DAP is typically used to identify cognitive strengths but it is found to be limited in assessing other aspects of children's personality.

In Figures 58 and Figure 59 the differences between the images of the feminine figures drawn by two different girls who were both 6 years old are clearly visible. Thus, while they have the same evaluation for cognitive development, the two pictures have a completely different influence on the percipient.



Figure 58. Drawing by a child with a very superior IQ score (MA: 12/ PA 6 .100)



Figure 59. Drawing by a child with a very superior IQ score (MA: 12/ PA 6 .100 =200)

In the drawing shown in Figure 58 the depicted girl has been coloured and looks cheerful, happy, smiling and positive. On the other hand, the image of the girl in Figure 59 which has the same good proportions of the body and plenty of details is in black and white. For this reason, and because of the presented tears on her face, this second picture gives the viewer a sad and despondent feeling.

4.2.2 The Draw-a-Person-test (DAP) Machover methodology

Around the 1940s, the idea that drawings could be used to determine emotional aspects and personality, apart from cognitive abilities, began to take hold. Drawings could be studied as visual representations of internal psychological states. The term “Projective Drawing” emerged and Projective Drawing Tests were developed. These were based on the accepted belief that drawings represent the inner psychological realities and the subjective experiences of the person who creates the images. Projective techniques are not only concerned with drawings but also include other modalities such as sentence completion tests, picture interpretation tests such as the Rorschach and the Thematic Apperception Test (TAT), as well as word association tests (Malchiodi, 1998).

A second approach that has attempted to broaden the analysis of drawings beyond a strictly cognitive assessment of mental ability emphasises the usefulness of drawings and paintings for an understanding of the child's personality (Alschuler & Hattwick, 1947; Bender, 1952; Buck, 1948; Burns, 1982; Burns & Kaufman, 1970, 1972; DiLeo, 1972, 1983; Hammer, 1980, 1997; Koppitz, 1968, 1984; Machover, 1949, 1953, cited in Golomb, 2004).

Projective drawing tests were based on the idea that children's drawing of specific figures such as people or common themes, such as houses, trees and figures, would reflect personality, perceptions, and attitudes. Drawing was thought to offer an alternative to self-expression that could bring out information about children that words alone could not. As the belief that drawings could be projective took hold, various projective drawing tasks for the purpose of assessing personality increasingly appeared in psychological and psychiatric literature: between 1940 and 1955, there was an abundance of published research on their use as illustrated in the *Journal of Projective Techniques* and the *Journal of Clinical Psychology* during that period (Malchiodi, 1998).

Machover developed further the Draw-A-Person test (DAP) in 1948. She adopted Paul Schilder's (1935) concept of the "body image," and formulated a series of psychodynamic hypotheses on which to base her interpretations of the drawings of the human figure.




She used figure drawings to focus on the way these drawings reflected anxieties, impulses, self-confidence and personality of the child. In this test children are supposed to draw a picture of a person. After that, they are asked to draw a picture of a person of the opposite sex related to the previous drawing. Sometimes, children are also asked to create a drawing of the self and/or their family members. Then the psychologist/teacher asks the child a series of questions regarding the drawings and themselves. These questions can be about the mood, the child's ambitions and the good and bad qualities of the people in the drawings. The overall purpose of the DAP test, including both the drawings and the questions about them, is to elicit information about the child's anxieties, impulses and personality. The DAP test is the most frequently used human drawing test nowadays. Indeed, Machover's (1949) publication on *Personality Projection in the Drawing of the Human Figure* remains the inspiration for almost all of the subsequent research on the clinical significance of human figure drawings.

In this pioneering effort, Machover advances her "body image" hypothesis as follows: "[T]he human figure drawn by an individual who is directed to 'draw a person' relates intimately to the impulses, anxieties, conflicts, and compensation characteristic of that individual. In some sense, the figure drawn is the person, and the paper corresponds to the environment" (1949, p. 35). Stemming from this premise, she proposes a long list of body parts and a key to their symbolic interpretation (Golomb, 2004).

4.2.2.1 Interpretation of the location of the figure in the drawing




Table III shows the meaning of the placement of the figure at horizontal areas on the sheet of paper, while Table IV shows the meaning of the placement of the figure at vertical areas on the sheet of paper.

Table III: The meaning of the placement of the figure at horizontal areas on the sheet of paper

<p>The top section</p>	
<p>The central zone (The central section)</p>	
<p>The bottom section</p>	

Source: Author

Table IV: The meaning of the placement of the figure at vertical areas on the sheet of paper

<p>The left column shows introversion, submissiveness, non-conflict personality, femininity.</p>	<p>The central column shows egocentrism, good self-esteem, confidence in oneself.</p>	<p>The right column shows extroversion, extremity, conflict, manhood.</p>
		

Source: Author

4.2.2.2 Interpretation of the size of the figure

The size of the drawn figure in relation to the drawing field is regarded as representing the self-assessment of the artist:

- Small Figures or Drawings: insecurity, possible depression, low self-esteem, withdrawal
- Normal size of Figures: good self-esteem, self-confidence, vitality
- Large Figures or Drawings: pretense, incredibly high self-esteem
- Slanted Figures: unstable, insecure, possible mental imbalance (Machover, 1949).

4.2.2.3 Interpretation of types of drawing lines

- Heavy pressure: Trauma or Aggression
- Light pressure: Fear
- Shading: Anxiety
- Lots of details in the drawing: need of control
- Constant Erasures in the drawing: Anxiety and Stress

4.2.2.4 Interpretation of types of drawing lines

Specific interpretations are also suggested for the characterization in the drawing of the different body parts, namely the head, neck, face, eyes, nose, mouth, hair, arms and hands, torso, legs and feet. (Machover, 1949).

Types of drawings of the head

- The head is a symbol of intellectual power, social balance and control over impulses. How it is depicted shows the artist's attitude towards intellect. A *disproportionally big head* could be drawn by a kid who has a brain disability, strong headache or a different head sensitivity.
- *Big head* in the drawing of the human figure: intellectual pretensions, high self-esteem in the intellectual sphere or big ego, but could be also connected with paranoid, narcissistic feeling or a fear of school overload.
- *Small head – (less than 1/10 of the figure)*: low self-esteem, insecurity, helplessness

Neck

The neck is often the connection between the head and the body, and the accent could represent a feeling of disunity between the two. The representation of the neck is regarded as a sign of intellectual maturity.

- *Missing out the neck* (after the age of 11): immaturity, primitivism, bad control over impulses.
- *Well-depicted neck*: ability to control one's impulses.
- *Very long neck*: curiosity and spontaneity but, when in combination with lofted arms and many bright colours, also suggests hyperkinesism (hyperactivity).
- *Lack of a face*: missing out the face is a sign of avoiding social problems.

Eyes

Eyes are the most important details in the face.

- *Well-drawn eyes*: curiosity and interest in the surrounding world.
- *No eyes*: a sign of isolation, breaking away from the world.
- *Closed eyes*: a desire to hide from the world, avoiding visual contact.
- *Round eyes with dots as pupils*: a sign of fear and strong anxiety.
- *Precisely drawn eyebrows*: aesthetical feeling and sophistication.

Nose

- *Missing out the nose* (above the age of 10): sign of caution and insincerity in the relationships.
- *Hooked nose*: disliking the surrounding people.
- *Small nose*: trustworthiness, kindness.
- The nose is received as a sexual symbol and, especially in the drawings of the boys, it underlines the masculine element.

Mouth

- *Missing out the mouth* (very rare occasions): fear of expression, passive opposition and unwillingness to share.
- *Open mouth* with strictly depicted lips: good verbal activity.
- *Thick lips*: girls who draw thick lips are thought to have developed sexually too early. Thick lips with boys are regarded as a sign of narcissism or the feminine sides of the character.
- *Teeth*: symbol of aggression, usually verbal, too much criticism towards others.

Hair

- *Hair pointing up like needles*: hostile attitude.
- *Hair drawn with soft, fine lines*: need of protection.
- *Bold shaded hair*: anxiety.
- *Hair depicted with sharp, long strokes*: bold character.
- *Complicated hairstyle*: intelligence, feminine, coquette.

Arms and hands

Arms and hands show the development of the ego and social adaptation.

- *Lack of hands in the drawing of a human figure*: complete separation from the surrounding environment, emotional deprivation, cold family relationship.
- *Hands right next to the body*: passive character, lack of flexibility in social contacts.
- *Hiding the hands behind the back or in the pockets*: insecurity, isolation from society or a feeling of guilt.

- *Shaded arms and hands*: hands that are too energetically stroked could show a feeling of guilt regarding aggressive impulses.
- *Big/long arms and hands*: desire for control and power.
- *Hands/arms stretched to the sides*: openness, communicativeness.
- *T-shaped figure (horizontally drawn arms)*: high level of activity, possible sign for hyperactivity.
- *Muscled arms, drawn by boys*: aiming towards masculinity, interest towards demonstration of physical power, possible primacy and primitivism.
- *Fingers with no hands*: rudeness, primitivism.
- *Hands and fingers depicted like a glove*: suppressed aggression.
- *Hands like a knob*: arrogant attitude.
- *Well-drawn fingers and hands*: sophistication and delicacy in communication.
- *Too long fingers with sharp nails*: aggression and hostility.

Body (torso)

- *Angular body*: aggression and masculinity.
- *Round forms of the torso*: softness and femininity.
- *Disproportionally big body*: feeling of dissatisfaction.
- *Disproportionally small body*: feeling of humiliation and being ignored.
- *Massive shoulders*: masculinity, roughness.
- *Dropped shoulders*: despair, crestfallen.
- *Sexual organs*: aggression, anxiety of the body impulses and bad control over them.

Legs and feet

- *No legs and feet*: stiffness and fear of changes, anxiety and insecurity.
- *Short and thin legs*: uncertainty, lack of security, feeling of hopelessness.
- *Short fat legs*: static, clumsiness.
- *Long fat legs*: pragmatism, relentlessness, perseverance.
- *Long, well-shaped legs*: independence and a strong striving for it.
- *Different sizes of the two legs*: ambivalence in the strivings.
- *Well-shaped feet, drawn in profile*: confidence and a feeling for stability.
- *Disproportionally small feet*: insecurity and low self-esteem.
- *Feet drawn as a flipper (as a smooth sequel of the legs)*: slowed-down development.
- *Drawn figure is from the opposite sex*:

If the child, when asked to draw a person, draws the figure as a representation of the opposite sex, it denotes conflict with his or her sexual identification. Figures 60 and 61 illustrate some of the different types of location, the positioning, and size of the figures and the details.

In Figure 60:

- *The location of the figure at the bottom*, indicates a concrete way of thinking, practicality, and aiming for safety.
- *The placement of the figure in the left vertical column* indicates introversion, submissiveness, non-conflicting personality, femininity
- *Eyes empty/ no pupil*: emotionally immature or may want to shut out the world; fear and strong anxiety.

- *Missing hands and fingers*: frustration and guilt.
- *Small feet*: lack of security, feeling of hopelessness.
- *Drawn figure is of the child's opposite sex*: conflict with sexual identification.

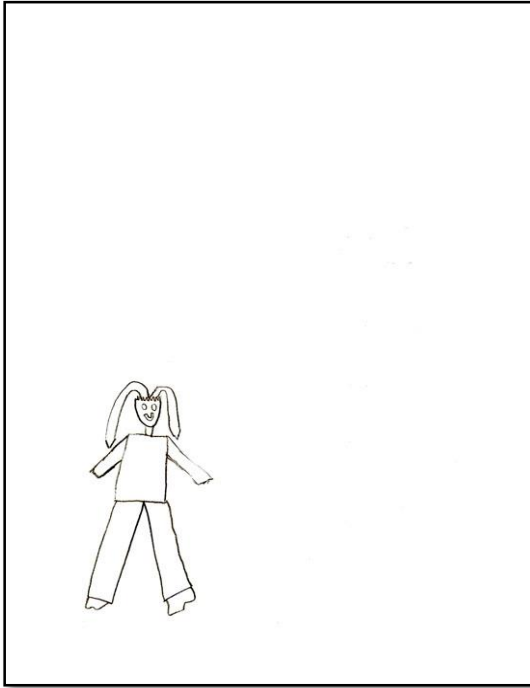


Figure 60. Drawing of a human figure at the bottom left section of the sheet of paper

In Figure 61:

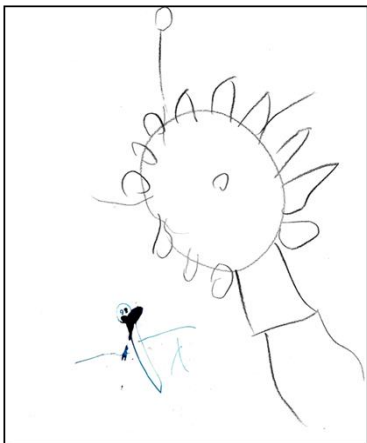
- *The central zone (The central section)*: egocentrism, self-confidence, activity, selfishness, confidence and efficiency
- *Large Figure*: pretense, incredibly high self-esteem.

- *Slanted Figure*: Unstable, insecure, possible mental imbalance. Circle empty eyes: show fear and strong anxiety.
- *T-shaped figure* (horizontally extended hands): high level of activity, possible sign of hyperactivity.
- *Too long fingers (red)*: may mean the person is overly aggressive.



Figure 61. Drawing of a human figure at the central section of the sheet of paper

Figures 62 and 63 show examples of the same “slanted figures” which indicate instability, insecurity and possibility of mental imbalance.



**Figure 62. Drawing of a
“slanted figure”**

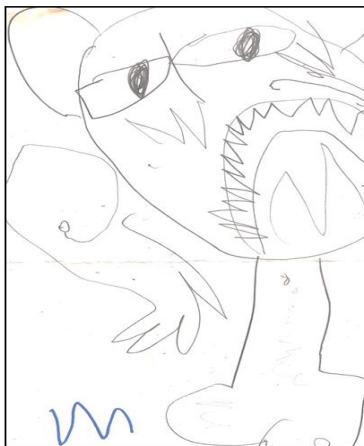


**Figure 63. Drawing of a
“slanted figure”**

The next two figures (Figures 64 and 65) show drawings of human figures with depicted teeth. This is a sign of aggression, usually verbal, and of the person being hypercritical to others.



**Figure 64. Drawing of human
figures with depicted teeth**



**Figure 65. Drawing of human
figures with depicted teeth**

One very common way of drawing a human figure by children is with the arms in horizontal position, the so called T-shaped figure. This way of drawing a human figure, as seen in the example in Figure 66, is usually created by very active or even hyperkinetic kids.

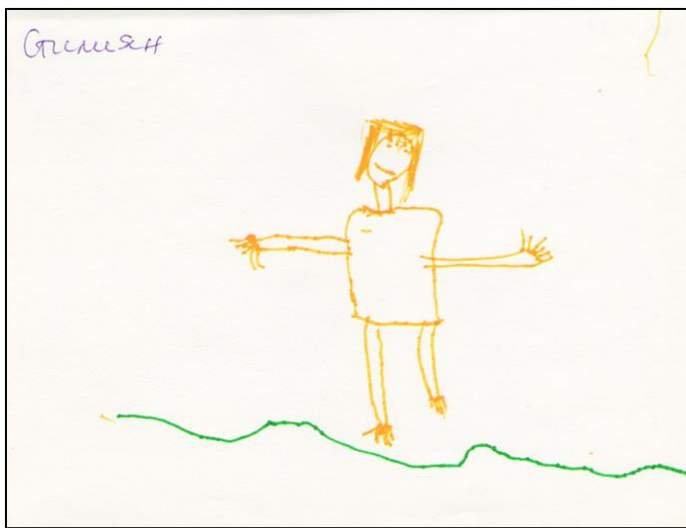


Figure 66. Drawing of a “T-shaped” human figure

4.2.2.5 Erasures

At pre-school age children rarely correct their drawings. Every erasure or an attempt to change any part of the body or detail is a sign for anxiety towards that particular detail. When children cross out a body part or detail, this can be a sign that they feel nervous about the specific detail or about the person represented in the figure. This activity of crossing out what the child perceives as negative – Figures 67 and 68 are good examples of this – can be a means of releasing the pressure the child feels towards it.



Figure 67. Drawing showing crossed-out details



Figure 68. Drawing showing crossed-out details

4.2.2.6 The figure with mirror reflection

Figure 69 presents an interesting drawing. It was created by an 8-year-old boy who was raised and lived in a healthy family with a higher than average financial status. The child was given the task to draw a human figure with no other instructions or requirements. He decided to create a drawing of a lonely human figure waiting at the bus stop. What is interesting in this case is the decision to depict a reflection of the environment and the human figure. In the reflection we can clearly see that the smiling face of the “real” figure has become sad in the reflection. This boy chose an indirect and dramatic way to tell us how he really felt, although he might be trying to hide it. This drawing is one really strong and powerful example of how children are inclined to show and tell in their drawings things that they would have difficulties sharing verbally.

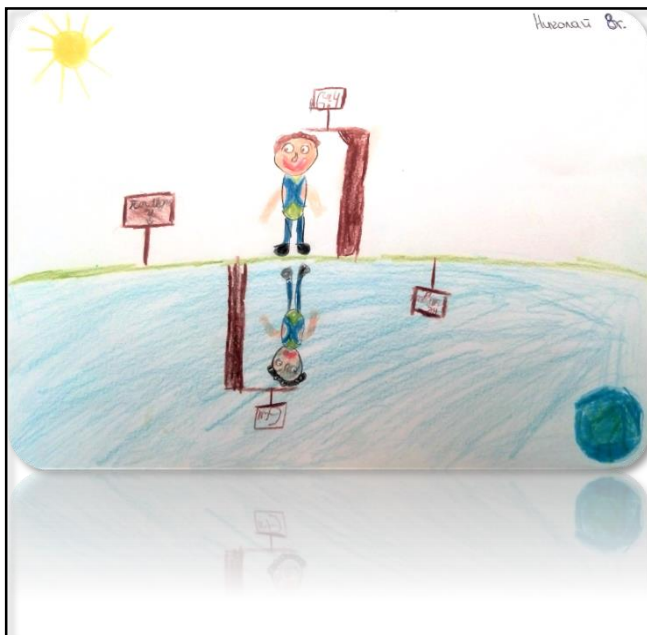


Figure 69. Drawing of a lonely human figure with a sad reflection, by a child at the age of 8

4.2.3 The Kinetic Family Drawing technique (KFD)

The Kinetic Family Drawing (KFD) test, developed by Burns and Kaufman in 1970, requires the child to create a drawing of his or her entire family. Children are told that they should include themselves in the drawing along with their other family members and they should all be “doing something”. The picture drawn by the child is supposed to show how the child feels about his or her family as well as the overall family dynamics. This test can sometimes be used for evaluating child abuse.

The KFD test differs from the traditional family drawing tests in that it adds a kinetic element to the picture. The addition of movement to the otherwise static drawing mobilises the child’s feelings about himself and about his place in the family. Thus, the drawings afford a glimpse of the

quality and the extent of interpersonal relations in the family. The KFD test has the potential of providing important information through indirect means (Elin & Nucho, 1979).

The KFD too attributes significance to the location of the family is placed on the sheet of paper, defined horizontally as top, central and bottom sections, or vertically as left, centre and right sections, can have a particular significance as seen below in Tables V and VI below.

Table V: Significance of the areas outlined by the horizontal defined as bottom, center, and top section.


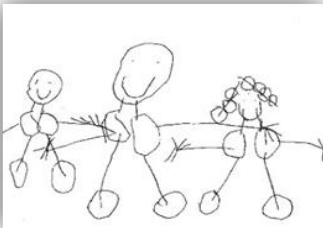
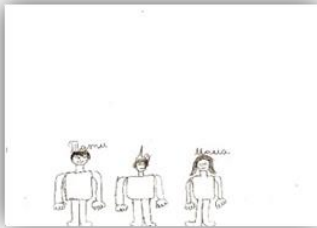



<p>The top section indicates presumption, fantasy, escaping reality.</p>	
<p>The central section indicates egocentrism, self-confidence, activity, selfishness, confidence, efficiency</p>	
<p>The bottom section indicates a concrete way of thinking, practicality, aiming for safety.</p>	

Table VI: Significance of the areas outlined by the vertices defined as left, center, and right columns

<p>The left column indicates introversion, submissiveness, non-conflict personality, femininity.</p> 	<p>The central column indicates egocentrism, good self-esteem, confidence in oneself.</p> 	<p>The right column indicates extroversion, extremity, conflict, manhood.</p> 
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Through the KFD technique, the therapist can get a wealth of information on the following:

- The interaction between the child and other family members;
- The inner feelings of the child towards the other family members;
- How the child accepts him/herself in the family community;
- The internalised feelings of the child and other family members;
- The hidden rules about the family, which are not immediately evident to the persons around the family;
- Who the most significant and the least significant member of the family is.
- Who is close to whom and who is not close to whom in the family.

Administering the KFD test

The child is asked to:

1. Draw his/her family.
2. Draw what s/he likes to do most with your family

Analysis of KFD drawing

This section highlights the details which need to be analysed so as to be able to gain access to the child's inner world.

Firstly, one needs to observe the child's readiness to perform the test. If the child starts drawing on the subject enthusiastically and right away, it is the first indicator of positive and warm relationships in the family. If, on the other hand, the child shows any reluctance or even refuses to start drawing then the reasons behind this behaviour need to be explored.

1. Placement of the figures

The way the figures in the drawing are placed provides vital information on the position of every family member in the family hierarchy.

- Who stands next to whom?
- Are the figures depicted close to each other or are they distant?
- What is the sequence of the drawing of the figures: who was drawn first, who was drawn after that, and who was drawn the last?
- Who is missing in the drawing?
- Who was first added, but then erased or moved in the drawing?
- Whose figure is the biggest, and whose figure is the smallest?
- Do the sizes of the figures correspond to their actual physical proportions?

2. *Physical Characteristics*

The physical characteristics of each person are also significant:

- Are body parts exaggerated or missing?
- What do clothes look like?
- What are the facial features?
- Which colours have been used?

3. *Figures' actions*

This section focuses on the interaction between the family members: what is every member of the family doing and with whom?

- Who is isolated from the group and does not take part in the action?
- Who is included in the action?
- Who is the leader and who is/are the followers?

Depicted gestures of proximity and affection like holding hands or hugs are a sign of closeness between the family members. Large distances and space between the figures, on the other hand, signal alienation between them.

4. *Style of the drawing of the family*

The family has a huge impact on the emotional development of children in their socialisation and in the skills they demonstrate in communicating with others. The basis of children's development, the way they feel about themselves and the level of their self-esteem in adulthood have their roots in the family environment. All these peculiarities are depicted in the drawing of a family and can be found in the style of the drawing. It is possible to perceive the inner experiences of the child which have been educated by or accepted from the parent. If the child has manifested a positive ME-image in his or her drawing, he or she perceived

it from the parents' attitude and demonstrated feelings. If the child has created a negative ME-image in its drawing of the family, then this is probably also a reflection of the attitude the parents have regarding their child.

Some obvious features can be significant: for instance, arms which are spread out could mean rejection; and stretched fingers and dark lines could imply fury. It is also very important to notice what is missing in the drawing. Sometimes the detail that is missing in the drawing can reveal much more than the existing images in the drawing.

4.2.4 The Kinetic School Drawing technique (KSD)

The Kinetic School Drawing (KSD) technique, developed in 1974 by Prout and Phillips, requires the child to draw a picture of himself or herself, a teacher, and one or more classmates. In fact, KSD is a projective drawing technique used to assess children's psychological adjustments and school dynamics. The picture is meant to elicit the child's attitudes towards people at school and his or her functioning in the school environment. Zians (1997) points out that the projective drawing procedure can be used to identify both the student's conceptual and intellectual maturity (Rogers & Wright, 1971) as well as cognitive development (Zains, 1997).

There is a wide range of parallels in interpretation ideas between the KFD and KSD methods. Similar to KFD (Burns & Kaufman, 1970; 1972), the student is provided with a blank sheet of paper (usually 8½ by 11 inches) and a pencil with an eraser, and then asked: "I'd like you to draw a school picture. Put yourself, your teacher, and a friend or two in your picture. Make everyone doing something. Try to draw whole people and make the best drawing you can. Remember, draw yourself, your teacher, and a friend or two and make everyone doing something" (Knoff, 1986, p. 229).

The KSD filled a void in the school psychologist's projective assessment battery. It was the first projective tool which dealt with the school setting (Zians, 1997). If teachers and parents develop their understanding of children's drawing stages and the fine shades and the

small differences in the usage of forms, shapes, details, colouring, space and compositional building in children's drawings, they can gain a deep understanding of the meanings in drawings using the KSD test. It is possible for teachers and psychologists to make their own modifications to this technique as long the basic principles of the original technique are followed. For example, children can be asked to draw thematic pictures like: "Me and my friends at school"; "I am at school"; "Me and my school"; and "My school life".

In the research carried out by Zians (1997) to study how drawings revealed the emotional and personality issues of students, the drawing characteristics in the checklists were divided into six categories: (1) actions of and between figures; (2) figure characteristics; (3) position; (4) distance and barriers; (5) style; and (6) symbols. After filling in the checklist, an interview (built on specific guidelines) was held to help the clinician glean more information from the student (Zians, 1997).

Chapter 5. What can we see in Children's Drawings

This chapter describes how to interpret the main features of the drawings of children at different ages and stages and/or with different personalities. You can find different drawings of a human figure created by children with delayed intellectual development or by children with different development peculiarities, pictures depicting a human figure belonging to the opposite sex, and also pictures of human figures revealing verbal aggression. There are a number of drawings of a family showing what a drawing looks like when a child lives in a traditional family, in an incomplete family, or in an extended one. Reference is also made to the drawings of children who included a family member who was no longer part of the family, as well as to the way children depict social relations in their drawings.

5.1 Drawings of a human figure

In their drawings, children with normal intellectual, psychological and physical development, feel happy drawing a human figure and try to fill the whole sheet of paper. This gives them a feeling of safety and balance about the environment they live in. Children usually use exaggerated a local colour palette which includes six to eight main and complementary colours. Often, when drawing a human figure, children tend to include the environment which surrounds it. The size of the figures and objects is in accordance with how important they are for the child. The most significant object is depicted as being the largest and has the most details. The size of the human figures is a lot bigger than the size of the doors and, sometimes, even bigger than the buildings. Objects are drawn according to their function: for example, they draw smoke coming out of the chimney and a shining sun.

In the drawings of relaxed and confident children aged between 5 and 14 with normal to high intellectual development, who are emotionally

stable, and who are growing up in a calm family environment, one can see:

- The sheet of paper is all filled up;
- Well organised and balanced composition;
- Structured space orientation;
- All body parts are present when drawing a human figure;
- The parts of the human body are proportionally drawn;
- A significant amount of detail;
- The inclusion of objects from the surrounding reality and/or positive symbols (flowers, sun, hearts, butterflies);
- Rich colouring corresponding to reality;
- Solid and thick lines;
- No scratching out, erasing or perforation of the sheet of paper.



Figure 70. Drawing of a relaxed and confident child with a normal to high intellectual development



Figure 71 (left) & Figure 72 (right). Drawings of a relaxed and confident child with a normal to high intellectual development



Figure 73 (left) & Figure 74 (right). Drawings of a relaxed and confident child with a normal to high intellectual development

The drawings in Figures 70 to 74 are an example of such positive attitudes towards the world and the surrounding environment. The children who painted these drawings are of different ages and the observer who has been trained to read children's drawings can easily notice this. However, what is common among these drawings are the signs listed above which are associated with good development of the cognitive functions and a positive psychological attitude. Even if we are not able to read children's drawings so well, one glance is enough to feel the positive message and emotion they reveal.

5.1.1 Drawings of a human figure by children with delayed intellectual development

Children whose intellectual development falls behind also show a delay in their development of art activities. The bigger this delay is, the slower the development of the drawing. This delay is particularly evident in the drawing of a human figure, as well as the space, compositional and colour expression abilities.

The drawings in Figures 75 and 76 were made by a girl at the age of 6.5 years who has been diagnosed with autism and intellectual disability. From these drawings we can see that they correspond to the intellectual age of development of a two-year-old, at which age children draw vertical and horizontal lines. These drawings reveal enormous similarities with the drawings of 2 year-olds in the scribble stage as seen in Figure 11.

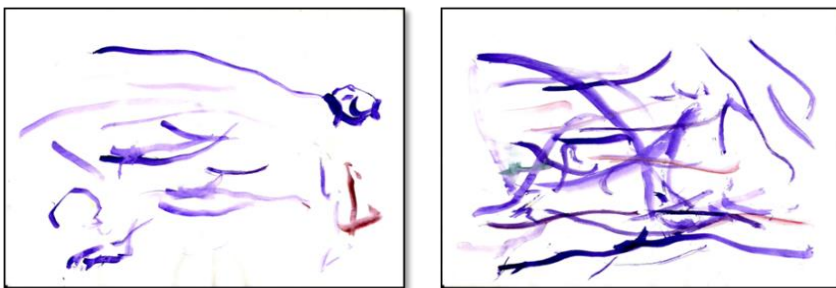


Figure 75 (left) & Figure 76 (right). Drawings by a girl at the age of 6.5 years diagnosed with autism and intellectual disability

The “tadpole” drawings presented in Figures 77 to 80 were created by children aged between 5 and 9 who had different degrees of severity of intellectual disability. This way of depicting a human figure is characteristic of three-year-old children. As has been already been pointed out, the drawing of a “tadpole” figure marks the beginning of conscious art activity. When one considers the relationship between the chronological age of the children and the 3-year-age equivalence of the drawings, one can get an approximate estimate of the degree of the delay. The application of Goodenough's test can give a more precise estimation, but even so it is important to point out that, to confirm the results we obtain, it is necessary to use other techniques to evaluate children's development.

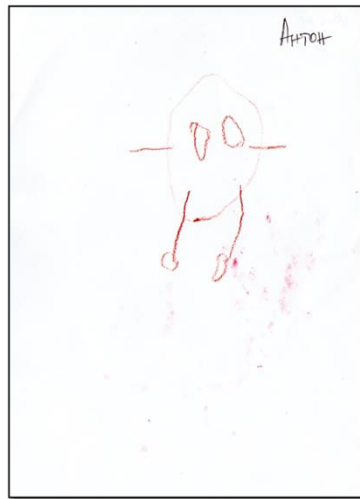


Figure 77 (left) & Figure 78 (right). Drawings by a child with an intellectual disability

If the drawings in Figures 77 and 78 are drawn by children aged between 5 and 7, we can detect a slight developmental delay. Children can still catch up and this delayed development can be compensated for with adequate pedagogical help.

The drawing in Figure 79 was created by a nine-year-old child with a significant degree of developmental delay. The child was diagnosed with autism in the Clinic for Child Psychiatry of Alexandrovska Hospital in Sofia. He spoke about himself in the third person singular using single phrases. He would repeat what he had just heard and what he had been asked. His attention span was short, and he quickly lost interest in what he was doing. He reacted when he heard his name being called out. He could not recognise the pictures of animals and was not able to imitate any animal sounds. He accepted to be hugged and touched. In structured activities he could keep his attention for around 3-4 minutes with a lot of help and control. The games and interests of the boy were typical for children of a very young age. In view of all these peculiarities it was not surprising that, according to the Goodenough's test, his mental age was around 3 years. If we estimate his IQ using the evaluation of the Draw-a-Person test (DAP) Goodenough methodology we would once again receive very low values – just 33,33 as demonstrated in Figure 80.

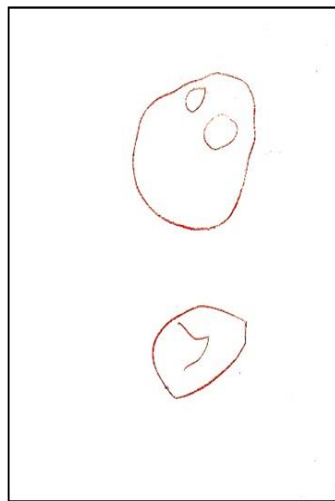


Figure 79 (left) & Figure 80 (right). Drawings by a nine-year-old child with a significant degree of developmental delay

This boy shows the same poor results in his written speech as seen in Figures 81 and 82. Very often, the lack of graphic skills in art in the pre-school period means poor ability to write in the primary school period. In the notebooks shown below in Figures 81 and 82 it is evident that the child was having difficulties following the models for creating letters and he was definitely not able to keep within the lines of the notebook.

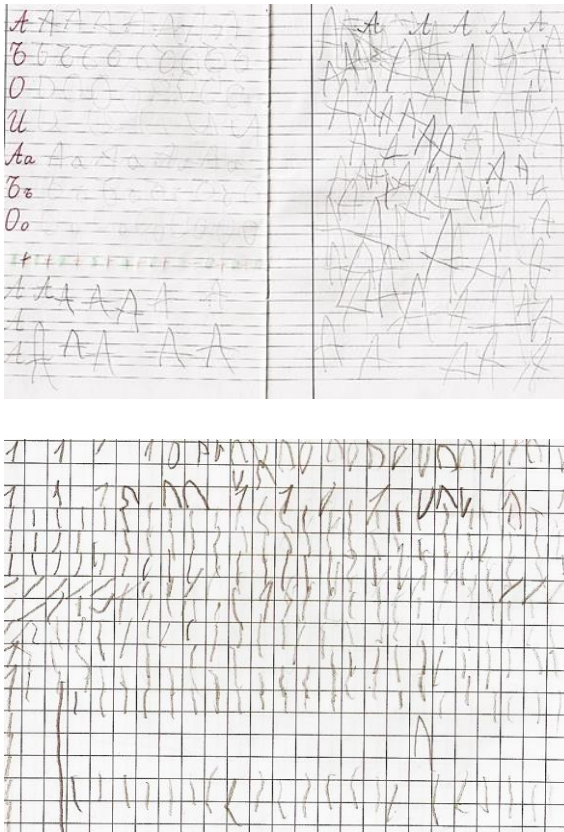


Figure 81 (top) & Figure 82 (bottom). The child who created the drawings from figures 79 and 80 has the same poor results in written speech

From the drawings shown in Figures 83 and 84, it is obvious that the way the human figure has been depicted is immature for children aged between 6 and 9 years of age. The human figures lack a significant number of important body parts and detail. Figure 83 shows a one-dimensional drawing of the limbs which is characteristic of children of a younger age. It is therefore not surprising that the results from Goodenough's test were really low – both children had an IQ score of 75.



Figure 83 (left) & Figure 84 (right). Drawings showing an immature depiction of a human figure

5.1.2 Drawings of a human figure by children showing different development peculiarities

Figures 85 and 86 are examples of drawings of a human figure by children showing emotional instability. The images are characteristic of children of a much younger age, while the composition which is unorganised is also typical of younger children. The character of the drawing line and the fact that there are no significant details indicate the lack of concentration and the short attention span of these children.



Figure 85. Drawing of a child aged 6.5 who had lived in an orphanage for six years



Figure 86. Drawing by a child who felt unstable and was not confident enough in the environment he lived in

Figure 85 shows a drawing of a child aged 6.5 who had lived in an orphanage for six years. At the age of 6 he was adopted by a single mother. His life in the orphanage had had a huge impact on his behaviour and adapting to the new family environment created a lot of serious problems for him and his mother. The child was having difficulties separating from his mother and was even scared of allowing her to go into the next room. He had the strong fear that he would be abandoned again and perhaps returned to the orphanage. This was the reason behind his maladaptive social behaviour. The human figure he drew is significantly tilted which showed the child was experiencing feelings of insecurity, instability and a lack of self-confidence. We cannot bypass the round empty eyes which have no irises and pupils which is a sign of a great egocentrism and a lack of interest towards other people.

The drawing in Figure 86 was also created by a child who felt unstable and was not confident enough in the environment he lived in. The human figure is also very noticeably tilted. What is interesting is that once again we see the same round empty eyes. But, what is most noticeable about this drawing, are the long fingers with clearly shaped palms. These can be interpreted as a symbol of aggression, rebelliousness and hostility. Moreover, this interpretation is further supported by the use of the colour red which is also associated with aggression and hostility.

5.1.3 Children's drawings depicting a human figure belonging to the opposite sex.

Usually when children are asked to draw a human figure, they intuitively choose to draw a figure belonging to their own sex. This is the reason why depicting a human figure from the same sex is accepted as a sign of good sexual identification of the child creating the picture. That is not the case with the children who made the drawings shown in Figures 87 and 88. Both children were boys, but each chose to depict the figure of a woman.

The father of the boy (aged 6.5) who created the female figure in Figure 87 had asked to see a specialist because he was becoming very concerned about the feminine and homosexual behaviour of his son. The boy who created the drawing in figure 88 was also showing feminine manners which had been noticed by his relatives and his teachers. This boy was 11 years old. It is important to notice that, in both drawings, the human figure is situated at the bottom left section of the sheet of paper, which is associated with femininity, obedience and introversion.

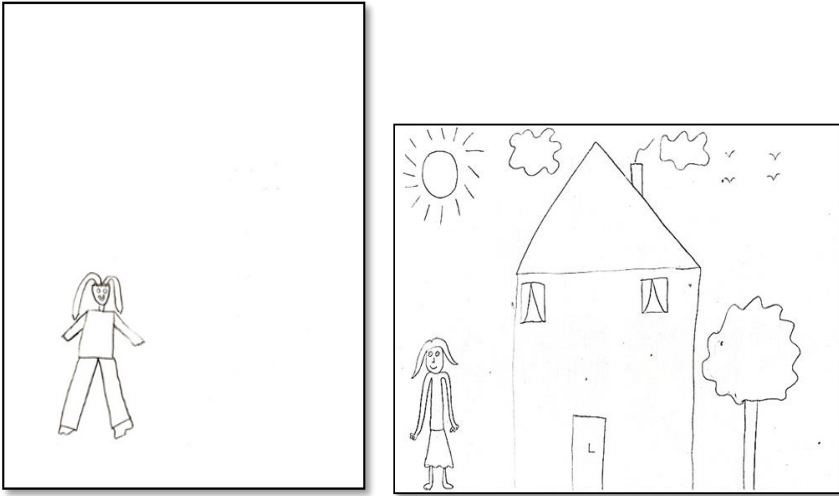


Figure 87 (left) & Figure 88 (right). Drawings by a boy depicting a female figure

5.1.4 Drawings of a human figure showing verbal aggression

When drawing a mouth, it is very common for children to choose to depict it as a curved line. This is, to some extent, a stereotypical way of drawing a mouth which is a sign of a happy and positive attitude towards the surrounding world. With time, children begin to separate the upper lip from the lower lip and they try to depict the characteristic outline of the lips.

For other children, drawing a mouth includes adding teeth as well as demonstrated in Figures 89, 90 and 91. Emphasis on this detail in children's drawings is associated with verbal aggression. Typically, these are the drawings of children who are often criticised or reprimanded. Verbal attacks can come from parents, teachers and other people in the child's milieu. Sometimes, children depict teeth when they are critical of their own communication with others or they are feeling the power of their verbal influence.

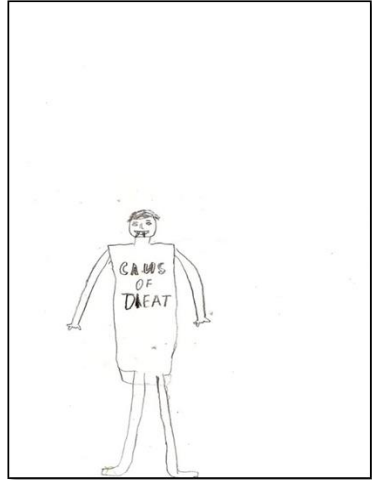


Figure 89 (left) & Figure 90 (right). Drawings of a human with bare teeth as a sign of verbal aggression

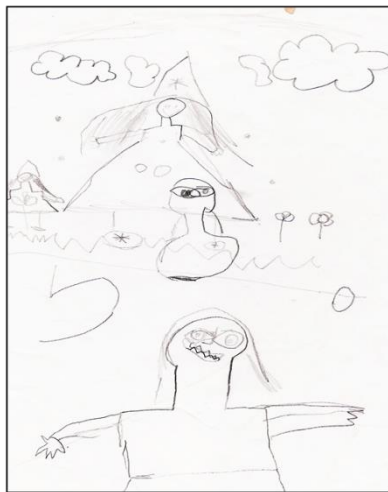


Figure 91. Drawing of a human with bare teeth as a sign of verbal aggression

5.2 Drawings of a family

Family is one of the subjects which strongly occupies children's minds especially during the pre-school age. Already, at this stage of their lives, they are subconsciously sensing the importance of the family and know how dependent they are on it. This is the reason why children usually take the initiative to start drawing a family even though they are not asked to draw this subject. The drawings in Figures 92 and 93 show that even when drawing animals, the child is showing them in a family environment which is similar to the one the child has. The rabbits from the drawing in Figure 92 are a family of four consisting of two parents and two children. From the plot of the drawing we can see that this "family" went out for a walk and is probably going to eat some carrots which can be seen at the bottom left section. It is worth mentioning that, in reality, the carrot grows in the ground but it is depicted above the soil. This is a clear example of the x-ray way of depicting objects. The drawing in Figure 92 shows two families: it is not only the cats - the main characters of this composition - which are depicted as a family, but so are the birds in the sky with two parents and five really small children. It is also interesting to note that even the clouds have little clouds attached to them.

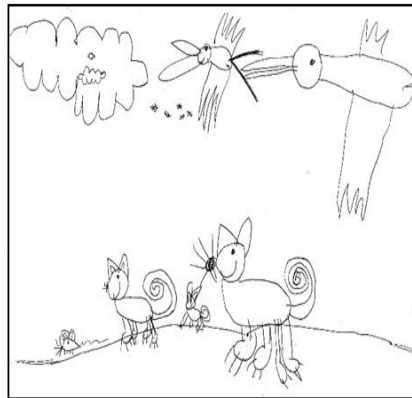


Figure 92 (left) & Figure 93 (right). Drawings of animals in a family environment

When drawing their family, children with normal intellectual, psychological and physiological development and who feel comfortable in their family environment, usually depict all the members. The figures the children draw are quite large and they strive to fill in the whole sheet of paper. The drawing on Figure 94 is a good example of a positive attitude towards the family the child has. This positive attitude and warm atmosphere in the family can be shown with the depiction of warm gestures such as a hug or figures holding hands, as can be seen in Figures 94 and 95. In these two drawings children also use oversaturated local colouring in which they include six to eight main and complementary colours. Usually, along with depicting human figures of the members of the family, they also draw their surrounding environment without, however, focusing too much attention on it. When a child devotes too much time to drawing the environment in which the family is situated, this speaks of the reluctance to complete the task and an attempt to get away from it. The size of the figures of each of the members of the family is correspondent to the importance they have to the child – the person who the child deems most significant is drawn the largest with very detailed body parts, clothing, and accessories. The size of the human figures of every member of the family is in correspondence with the understanding and feeling that the child has of the family hierarchy. The parent figures are drawn larger than the figures of the children, and the size of the children is in correspondence with the height and age of the brothers and sisters, but not according to the importance they have in the child's life.

The closeness and attachment to one or another member of the family is shown by depicting those members really close to each other. The desire for remoteness or having some misunderstandings with a certain family member could be the reason why figures are drawn at a certain distance away from the rest of the figures. Children sometimes also draw some kind of barrier between family members. The sequence in which the figures are depicted is also significant: those portrayed first have greater importance for the child.



Figure 94 (left) & Figure 95 (right). Drawings showing warm gestures between the family members

In the drawings of calm and confident children aged between 5 and 14, who are being raised in healthy families in a gratifying, calm family environment, one can see:

- A well organised and balanced composition;
- Clear space orientation;
- All family members are depicted;
- Gestures of closeness between the family members (usually holding hands);
- Figures which are proportionally depicted;
- Significant amount of details;
- Proportionality between the figures of the children and those of the parents;
- Objects from the surrounding reality and/or positive symbols (such as flowers, sun, hearts, butterflies);
- Saturated and rich colouring, corresponding to the colours in real life;

- Thick and confident lines in the drawing;
- The sheet of paper has no scratching, erasing or perforation.

5.2.1 Drawings of children growing up in a nuclear family (traditional families)

Even when children belong to large families, when they have a good feeling about their family, they will still portray all the family members in their drawing. They also use normal colouring when showing each and every one of them as can be seen in Figure 96.

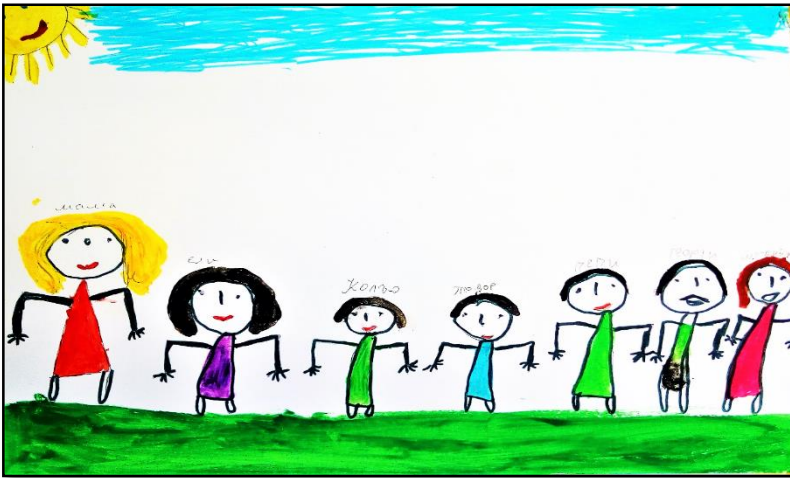


Figure 96. Drawing by a child from a big family

The drawings in Figures 97 to 100 were also made by a 7-year-old child, Dan, who was later diagnosed with autism. Even though he had been showing symptoms of autism, his parents had been reluctant to accept the difficulties of his development and look for professional help. The only activity the child was doing was art activities and, according to his parents, this was having a positive impact on him.

Initially, the child absolutely refused to take part in any kind of activity and to have any communication with therapists and teachers. He showed this refusal verbally with words and even screams. However, he gradually started showing an interest in watercolour and the graphical opportunities they were offering him. After the teacher demonstrated the act of drawing, and after the child spent some time considering it, he finally started to draw with eagerness and enthusiasm.

Figures 97 and 98 show how the same child depicted his family. For this task he could use whichever watercolour he liked. He also created a drawing on the same subjects with pencils so as to be able to trace the character of the drawing line and the details of the image. The willingness he showed to complete the drawing on the subject is an indication of his positive attitude towards his family. When drawing, he not only fills in the whole sheet of paper but also goes out of the borders of the paper. The non-observance of the borders of the drawing field can be seen in the drawings of children who are impulsive and who have difficulties controlling their emotions. Moreover, filling in the whole sheet of paper and the deliberate going out of its borders are a sign of a strong feeling for uneasiness.

The sequence in which the child draws the figures is connected with the importance of the family members. Dan starts to draw himself, the so-called Me-figure which is a sign of high self-esteem, egocentrism and high expectations from the people who surround him. The placing of the figure in the centre of the paper and the fact that it dominates the rest of the figures around the child confirmed the interpretation.

After depicting the Me-figure, the boy draws a pine tree to which he devotes a substantial amount of time and attention. The tree and the human figures are drawn quite immaturely for a child his age. The child postpones the drawing of the parents which, according to Burns and Kauffman, is a protective reaction because of problems in the family: there is the desire of the child to distance himself from the family (Knoff, 1986).

After the boy has been reminded about the subject of his drawing he proceeds to add the rest of the figures. The second member of the family he draws is his mother. Her figure is placed on the right side of the Me-

figure. What we can see is that her size is much smaller than the size of theme-figure. There is also an attempt to draw hair over his mother's head. The smallest and the last figure to be depicted is that of the father, which is a sign of a weak emotional attachment to him and a lack of respect for his authority.

When drawing his family this 7-year-old boy used only the black colour. Children choose black as a "cry for help" according to Burns and Kauffman. This colour denotes uneasiness, fear, anxiety and depression (Knoff, 1986).

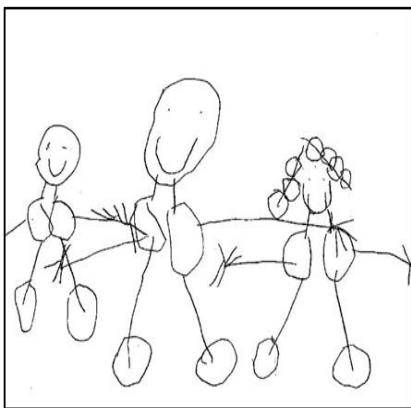


Figure 97 (left) & Figure 98 (right). Drawings of a family by a child diagnosed with autism

The subject of the drawings drawn by the same child and shown in Figures 99 and 100 was "Me and my friends". The aim was to trace the relationships the same child had outside the family environment. Similar to the previous drawing, he also chose to draw with watercolour and preferred to use mainly the black colour. It was interesting to note that, on being presented with the graphic opportunities of other colours, he initially looked like he was keen on using them. However, right at the point of putting them on the sheet of paper, he changed his mind and opted for the black colour once again.



Figure 99 (left) & Figure 100 (right). Drawings by a child with autism on the subject “Me and my friends”

The first drawing, presented here in Figure 99, once again started off from the Me-figure and, similar to the other drawings, it was in the centre of the sheet of paper. After depicting himself, he started drawing another figure which he called by a female name. Following this, he started to write letters, then he drew a tree and, once again, he drew himself. In the drawing there is a schematic image of a school.

In the second drawing on the same subject, seen in Figure 100, the drawing started once again with the Me-figure which was placed in the centre of the sheet of paper. Once again, when offered a set of coloured pencils, he still opted for the black-coloured pencil. He gradually added more and more human figures which were very similar in appearance although the child called them by different names. In the process of making the drawing the child was making evaluations and describing characteristics of every one of the drawn figures. For example, about one boy he said: "He is very good friend"; about another he said: "He is smiling all the time"; and about one particular girl he said: "She is a polite

girl". The figures are numerous and he proceeded to place them one on top of the other without respecting any proportional or space relations. The drawing shows immaturity because it is typical of that of a much younger child. Therefore, in the case of a child this age, it is a sign that relationships with children of the same age have not been well-developed. The fact that the child filled in the whole sheet of paper is a sign of uncertainty and that he has a strong need for support, while the lines that go out of the paper are a sign of impulsiveness and anxiety.

Figures 101 and 102 show the drawings of a 7-year-old boy. His father sought a consultation with a psychologist and an art teacher because he was worried about his son's homosexual inclination.



Figure 101 (left) & Figure 102 (right). Drawings by a child with homosexual inclination

Figure 101 shows the drawing of a family with all four members of the family. In the case of the 7-year-old, the boy created a Me-figure. This can be connected with high self-esteem which is confirmed by the bigger size of the figure when compared to the other members of the family. The fact that the Me-figure is the most detailed one (it is the only figure that has hands and fingers) is very significant. The fact that the boy has drawn the size of the Me-figure larger than that of the parents shows that he did

not accept or understand the parents' authority and he has thus disrespected the hierarchy in the family. After the Me-figure, the second figure he drew was the figure of the father who is placed right next to the boy which shows the attachment the child felt towards him. The third figure to be drawn was that of his older sister who, according to the father, was not very close to her brother. After a short break in the drawing process, the boy created the figure of his mother. The fact that he postponed the creation of her figure can be connected with their various conflicts and his dissatisfaction with the relationship. This dissatisfaction is further emphasised by the fact that his mother was the last drawn and smallest figure. The line used to draw his mother was very light, uneven, spider-web-like, which was in sharp contrast with the lines he used to draw the rest of the figures. This type of line is a sign of uneasiness in the creator connected with the object that he is depicting: this was confirmed by the father who shared with the psychologist that the mother has been neglecting the boy and there was almost no communication between them in every-day life. For example, on coming back home from work, the mother would usually just switch the TV on and she would not utter a word to her son.

Another feature common to the two drawings in figures 101 and 102 is the placing of the figures at the bottom left corner of the sheet of paper: this is the preferred positioning of figures of introvert and non-confrontational children with a pragmatic way of thinking. Moreover, this positioning also denotes the feminine features in the character: the 7-year-old boy chose to draw a female figure – seen in Figure 102 - when he had been given the task to draw a human figure separately.

A 10-year-old girl presented her family in her drawing shown here in Figure 103.



Figure 103. Drawing of a family by a girl at the age of 10

The composition of the drawing (bottom, centre) signals a concrete way of thinking, practicality and a striving for security. The girl devoted a long time to drawing the elements of the landscape before starting to draw the family members, revealing an emotional reaction and some opposition to the subject of the family. What is impressive is the small size of the Me-figure when compared with the figures of the parents. An interpretation of this could be that the child sees herself as having an insignificant part in the family environment. Depicting the self as a very small figure can sometimes show the child's unsatisfied need of care and security from the parents: in this girl's case it was usually the grandmother and grandfather who took care of her. This child can be described as being shy, lacking self-confidence and needing protection. Moreover, the lack of colouring-in of the figures and the frequent erasure can further confirm the dissatisfaction from the family environment.

The same child created another drawing of a family eight months after the first one and, this time, the child included her grandmother and grandfather as seen in Figure 104. One is impressed by the immature way of drawing the figures and the lack of important details. In addition, the

uneven and chaotic lines which have a lot of crossings and repetitions also speak of a significant disinterestedness on the subject of the family.



Figure 104. Drawing of a family by the author of the drawing in Figure 103

The drawing in Figure 105 shows a family created by a 10-year-old girl who, according to her parents, had an introverted personality and was experiencing difficulties at school. This drawing reveals the weak emotional connections between the family members reflected in their chaotic positions around the sheet of paper. Moreover, there are no gestures of closeness which children generally use when drawing their families.

By representing the family members in that way, the girl was expressing a strong desire for greater unity and connection between them. Although she understood and accepted the family hierarchy she was dissatisfied with the existing relationships within the family.



Figure 105. Drawing of a family by a 10-year-old girl

By representing the family members in that way, the girl was expressing a strong desire for greater unity and connection between them. Although she understood and accepted the family hierarchy she was dissatisfied with the existing relationships within the family.

Of significant interest in this drawing is the strongly marked contour in the image of the mother which shows a feeling of lack of understanding and security: the girl was not accepting the relationship she had with this figure. Another extremely interesting detail in the drawing is the O-shaped mouth the child drew on herself. Looking at this detail we can almost hear the sound of a scream as it is presented in Edward Munch's painting with the same title. Furthermore, we could not surpass the symbolic depiction of the genitals the child included in the Me-figure. The transparency of separate details in the drawing of a child at primary-school age speaks of poor control over their emotions. Showing genitals is always a disturbing sign. According to the system of Elizabeth Koppitz (Dacheva, 2005), it is perceived as a sign of extreme uncertainty or anxiety, which includes a bad body anxiety and a weak control over its impulses. Malchiodi (1998) notes that in her practice she has seen "a

great many drawings with overtly sexual content, most of them from children who have been sexually abused" (p. 125).

A different example of showing a family can be seen in the drawings of a 5-year-old girl (Figures 106 and 107). In the drawing shown in Figure 106, the child depicted all the family members holding hands. We can clearly see the figure of the father is almost twice as big as the figure of the mother. Drawing one of the parents in a much larger size than the other means this parent is the dominating figure in the family and has the greater authority. The fact that the child drew herself and the mother in a similar manner shows good sexual identification. After depicting the three figures the girl had a big break and then drew a small yellow creature right next to the Me-figure. On seeing this drawing most people would think this is the family pet. Actually, after hesitating for a while, the child depicted her new-born brother. This way of including the sibling in the family drawing shows the perplexed experiences the new member of the family has created in the author of the drawing. The family structure which the girl had been used to and accepted had suddenly changed and she was unsure about including the new member into this structure.



Figure 106. Drawing of a family by a 5-year-old girl

In the drawing of a family which this same child did 6 months later, it can be clearly seen that she had come to accept the new family configuration (Figure 107). This is expressed with drawing the figure of the little brother and giving him a clear human appearance and placing him between the Me-figure and the figure of the mother.



Figure 107. Drawing of a family by a 5-year-old girl

Figures 108 and 109 show the drawings of a brother and a sister who used to live, until recently, with their grandmother and grandfather. A few months after the grandparents moved out to live in a new home, both children could still not imagine the family drawing without including their figures in it. The children were thus showing their attachment to the grandparents by including them in the drawing albeit in a different building or in a different place.



Figure 108 (left) & Figure 109 (right). Drawings by a child whose grandparents recently moved in a new home

The drawing of a family seen here in Figure 110 was created by a child aged eight who was the only child in a family with a higher than average social status. Every one of the figures in this family is placed in a different space separated from the others. This way of representing the members of the family speaks of extremely weak emotional connections between them. During the process of creating the figure of the mother there were multiple erasures which is a sign of conflict connected with her figure. On the other hand, the father is shown with detailed eyes, eyebrows, nose and mouth which is a sign of a positive attitude towards this person. Placing him in the company of a football game on the television and a glass full of beer means that the child had accepted this as the way his father preferred to spend his free time. The Me-figure is also created in a separate drawing space and is shown swimming in a pool. The child looks quite lonely in this big space he created for himself. The sign showing a finishing line which can be seen in front of him can mean a feeling of sport competitiveness and the desire to be a winner.



Figure 110. Drawing of a child at the age of 8, who is living in a family with a higher than average social status

5.2.2 Drawings of children who are growing up in incomplete or extended families

When drawing their families, children show all family members and they are not adding or omitting certain family members that do not live with them all the time – for example as in the case of grandmothers and grandfathers. Children who live in such extended families with their grandparents, aunts, uncles or cousins include these close relatives when they draw the real family. When a particular family member with whom they share a home is left out, it is usually a sign of conflicts of a negative attitude of the child towards this person.

5.2.2.1 Showing the real family members

Children who are raised in incomplete families also depict the real number of family members. At the point when the child realises and accepts the family situation, they no longer get a feeling of incompleteness and this makes them ready to exclude the family member

who is missing. In the drawing of this 13-years-old boy we can see three figures (Figure 111). According to his mother, the boy would at times show aggression and have outbursts of anger alternating with episodes of feeling depressed and anxious. The three figures in the drawing are the Me-figure, the mother and the grandmother of the child. This drawing portrays the real family situation at the time of the drawing: the parents were divorced and the boy was living with his mother and grandmother.

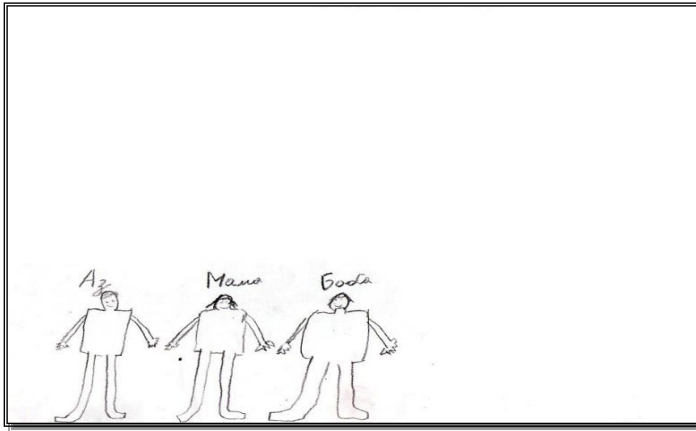


Figure 111. Drawing of a child at the age of 13, living with his mother and grandmother

The human figures are entirely situated in the bottom left section of the sheet of paper. This speaks of a specific way of thinking and a striving for security in combination with introversion and obedience. The drawing process begins with the Me-figure which is a sign of a good self-esteem, egocentrism and a significant pretentiousness towards the others. The figures are situated very close to each other and in their gestures we can see their “attempt” to hold hands. All the figures are of the same size which shows that the child is not familiar with any kind of family hierarchy and disregards the members’ authority.

The figure of the father is missing which is a sign of an emotional distance between him and the child. It also shows that the child does not

accept him as a member of the family. Since the child has ignored the father who does not live with them, he accepts the family situation the way it is. All the human figures in the drawing are shown as schematic images with no certainly underlined details which is a sign for emotional immaturity. The child chose the colour black to depict his family which shows signs of a depressive mood when the subject of family was brought up.

5.2.2.2 Drawing a family: including a family member who is no longer part of the family

When a child includes a member of the family who no longer forms part of the family, it is usually a sign of unacceptance of the situation: the child is using the drawing to show the desire for a complete family. An example of this is revealed through the drawings of an 11-year-old boy who lived in an incomplete family composed of his mother, brother, sister and his grandfather. The parents were divorced and he was the eldest child in the family. He would very frequently have arguments with his grandfather and their relationship was characterised by conflict. His drawing seen below in Figure 112 will be analysed in detail.

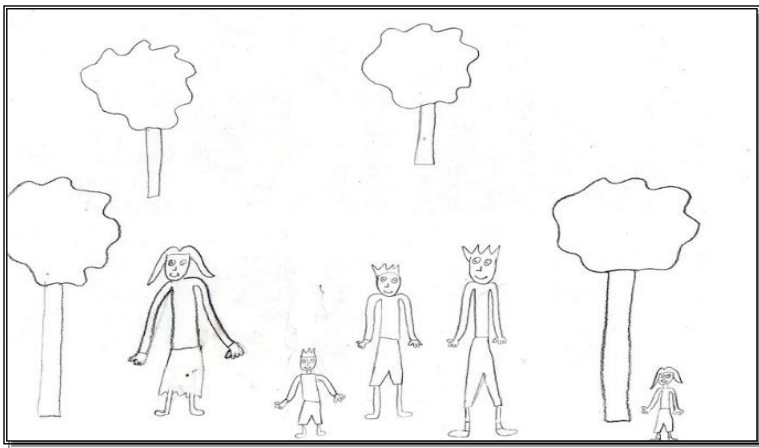


Figure 112. Drawing of an 11-year-old boy

The first thing that is impressive is the fact that, right from the very beginning of the drawing process, the boy keeps erasing multiple details from the figure of the mother and from his own figure. This is one of the main signs of indecisiveness and lack of self-confidence. It also reveals that there are problems in his communication with others.

This boy draws the eyes of the figures as a circle with a dot in the middle: this is a sign of fear and strong anxiety. Moreover, the lack of ears in the images of the human figures is an indicator of the unwillingness to hear what the others are saying and a desire to separate oneself from the outside world. Another observation that can be made in this drawing is that all the figures do not have a neck. The diagnostic sign of this is immaturity and weak control over one's impulses. Drawing shoulders with a curved line shows low self-esteem, and the depiction of the feet with no heel but with a smooth curved line is understood to be a sign of some degree of delayed development.

The family which this 11-years-old boy depicted is situated at the bottom section of the sheet of paper which can be connected with his specific way of thinking - practicality and a striving for security. The figures are not connected to each other and there is no closeness between them. This can be a sign of weak emotional connection between the members of the family. The small size of the Me-figure can mean shyness, insecurity and a need for protection and security, or it can mean that the child is feeling lonely and uncertain. The figure of the sister is separated from the rest of the figures. This is an indicator that this person is the least important for the child but it can also be a subconscious manifestation of jealousy. On this issue the mother did share with a psychologist that the child often had conflicts with his sister. The inclusion of the father in the family drawing when the parents were separated shows a big desire to have a complete family and a subconscious expectation for the parents to get back together. The child does not realize and accept the fact that his parents are divorced. On the other hand, the figure of the grandfather who is actually living with the family is not included in the drawing which confirms the conflictual relationship the child has with him. The family members are surrounded

with trees which shows the need of support and protection. The multiple erasures speak of stacked negative emotions, insecurity and bellicosity.

Figure 113 shows the drawing of a 7-year-old girl who chose a similar way to depict her family. She was growing up in a family with no father and was being raised by her mother and her grandparents. According to the teachers who were in contact with the girl, her development was delayed. The immature manner of drawing the figures makes an impression right away. The grade the child received on the Goodenough's test was 93.5 which is in the low border line of normal mental development. In spite of these low results, we could not talk about intellectual disability yet. According to Machover's methodology regarding the parts of the human figure we could decipher a few emotional indicators. The short hands are a sign of a lack of aims, difficulties in communication, and timidity in the relationships. The fingers with no palms are a sign of primitivism, impulsiveness and aggression. The lack of feet reveals a feeling of insecurity.



Figure 113. Drawing of a 7-year-old girl growing up with her mother and grandparents

When working on the “Draw a family” test, the child postponed the creation of the family. The drawing of a family started with the depiction of a house. After that the child started to draw the figure of the mother, and then the Me-figure. Next she created the ground and grass in the drawing, and then added on the figure of her grandfather. She then proceeded to draw a flower, clouds, sun before depicting the figure of her father at the bottom right section of the sheet of paper. The girl included her missing father in her drawing although he was symbolically separated from the rest of the figures by the house and the flower. This means that the child was still not accepting the separation of her parents and this was an expression of her strong desire to have a complete family. At the same time, by showing the father separated from the rest of the figures makes one think that the girl understood, to some degree, the remoteness of her father in real life.

In this drawing the girl chose not to depict her grandmother. Despite multiple reminders from her grandmother, who happened to be present during the test and with whom the girl actually lived, to include her figure as well, the girl decided not to include her. A child “skips” drawing a member of the family when he or she associates them with unpleasant emotions and memories. In this case, this was an expression of an emotional conflict and dissatisfaction.

Another example which shows the inclusion of a missing father can be seen in the drawing of a family by a 9-year-old boy whose father had passed away and was being raised by a single mother. What is interesting in the drawing, shown here in Figure 114, is that the boy placed the composition entirely at the bottom section of the sheet of paper. This way of composing the drawing indicates a specific type of thinking, practicality and a striving for safety, but it is also indicative of a weak imagination and not having enough flexibility in the thinking. In creating the Me-figure similar to the figure of the father, the child demonstrated good sexual identification. But the size of the Me-figure and the fact that it was drawn almost as big as the figure of the father can show a disregard of the family hierarchy. Other than signifying disrespect of adults’ authority, the large Me-figure can also mean an unrealistically high self-esteem. The fact that the child included his dead father in the drawing of

his family means that the boy had still not accepted the loss of the parent. His depiction indicates a strong desire for a complete family as he once knew it.

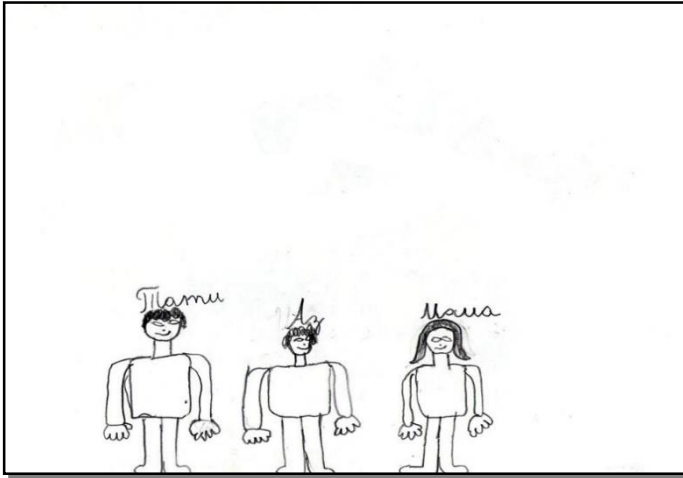


Figure 114. Drawing of a 9-year-old boy whose father had passed away

When looking the drawing using Machover's methodology, we can grade the emotional indicators in it. The "blind eyes" of all the figures in the drawing can mean remoteness, unclear perception of the world, avoiding visual stimulation, difficult adaptation and emotional immaturity, anxiety and problems with communication. The rectangular torso is the other important element in the drawing of this 9-year-old boy. It can mean an inclination towards aggression, hostility and uncertainty. Here we can also see multiple erasures which can mean strong emotional attitudes towards the depicted object or a certain part of it. Erasing usually aims at improving a certain detail, but here the child erases the same parts over and over again, and recreates it in a similar way every time, which does not improve the drawing.

Figure 115 shows how a 6-year-old girl's interesting way of depicting a family in which the father had passed away. When taking the "Draw-a-

family” test, the child showed a willingness to create a drawing on the subject “Me and my family, seen in Figure 115. This is a sign of a positive attitude towards the family. The girl started the drawing with the creation of her Me-figure which can mean good self-esteem, egocentrism and, to a certain extent, pretentiousness towards others. The second figure the child created was that of the mother. Her figure has a lot of detail and is as well-depicted as the Me-figure. In addition to the precisely-drawn clothes, the figures also have accessories and jewellery which enforces the positive feelings the child had regarding the figures of her mother and herself. The third figure the child created was the figure of the uncle. The child created this figure after refusing to draw her grandmother who, according to the child, was “difficult to create”. The child did end up drawing the figure of the grandmother as the fourth figure in the picture after receiving support from the therapist in drawing this “difficult” figure.

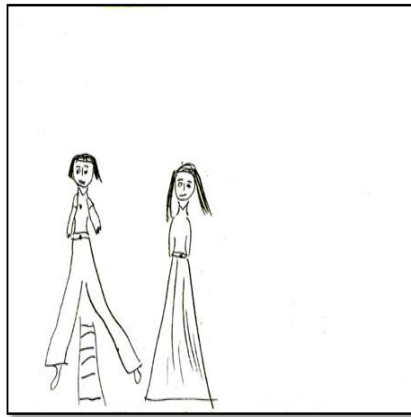


Figure 115 (left) & Figure 116 (right). Drawings by a 6-year-old girl whose father had passed away

The fifth figure was that of the father. The girl stopped drawing for a while and when she was asked the question: “Have you completed the drawing of a family?” she answered that she had a father who had passed

away. After this she turned the sheet of paper over and created the figure of her father on the back side of the same sheet as seen in Figure 116. The figure of the father only had a contour with a ladder next to his legs. Even though children are not always aware of the symbolic meanings objects have, they intuitively feel the meaning these might have and place them accordingly in their drawings. In view of this, the image of a ladder can be a sign of how the girl felt the remoteness and inaccessibility of the parent.

The sixth and last figure which the child drew was that of one of her cousins with whom she was particularly close but who did not actually qualify as a member of the family. She is shown right next to the figure of her dead father. The extended content of the family showed the actual situation the girl was living in.

All the figures are all the more impressive because of the eyes which were very well drawn – a sign of inquisitiveness and interest towards the world. The irises are looking to the left, demonstrating the desire to direct the attention from the Me-figure towards another part of the drawing. The way of depicting the eyebrows indicates sophistication and aesthetics. The open mouths of the figures of the mother and the grandmother show verbal activity. The well-drawn neck shows the ability to control impulsive reactions. The right place on which the arms are placed is a sign of intellectual maturity. Conversely, hiding the hands behind the back can mean shyness, low self-esteem and a feeling for guilt.

5.3 How children depict the social relations in their drawings

In this section I present research on the use of children's drawings as a diagnostic tool to state the level of social adaptation of children aged between 6 and 7 years. At this age they would have completed the stage of their preschool education, and the social skills that they have gained so far will be of crucial importance in their new school environment.

For the aims of this publication, the techniques of "Draw-a-Person test" and "Kinetic school drawing" have been adapted. Their use has made it possible to analyse themes in the child's drawing for the purpose of diagnosing the child's attitude towards the social environment. In

researching the drawings, the following indicators have been used for analysing and diagnosing: willingness to work on a certain theme; the correspondence of the image with the theme; the size and location of the main figures; the level of saturation with details and colours; and the connection between the different objects included in the drawing.

In the thematic drawings of the 6-7-year-olds, we are looking for a decoded message executed in a graphic way at the level of social development of the child and their awareness of themselves regarding their environment. By using the language of drawing, children express their position as “The Self” in society regarding their relationships with the people who are around them.

According to Piaget, at the age of 6-7 years children are in the stage of intuitive thinking, which is based on more dissociated ideas, thus closing the preoperational period. The transition in cognitive thinking of 6 -7-year-olds is linked with the transition from preschool to the next period, namely that of becoming a student. At this age, children gradually expand their horizons and the borders of their micro-world: they develop an ability to communicate with other children their age and with adults; they are capable of perceiving new rules; they become more capable of changing activities as well as fulfilling requirements. The child is gradually socializing and adapting to the social environment. This is expressed with the transition from the typical self-centered position of the child to a more objective relationship with the surrounding people. This is accompanied by an increasing understanding of other peoples' points of view and a willingness for collaboration with them.

Communication is of great importance for 6-7-year-olds. They develop an ability to choose the children that they want to communicate with. This is the reason why the first friendship relations develop at this age. In addition to the desire for collaboration, the child is also starting to develop the eagerness to compete. This sense of competition makes the child want to stand out and to draw attention upon himself or herself.

Socialization is defined as a development of the personality in the aspect of its social determination and function (Psychology Dictionary, 1989). In the process of socialization, the individual turns into an independent and, to a greater extent, a consciously acting person, having

a certain social function and participating artistically at forming social relations. (Psychology Dictionary, 1989). Socialization, according to Ivanov (2010), is functioning at the specific "socius" of the person one is socializing with and which is causing a change in both the socius and the person. Ivanov adds that socialization can be defined as an inclusion of the person in society and social relationships.

Kindergarten is the first social structure the child usually participates in. In this structure, children are asked to follow certain rules, to create relations of support and collaboration with other children their own age and with the adults who take care of them. Rusinova (2006) thinks that the impact of the socializing processes on the adaptive skills of children at preschool age are affected positively with pedagogical interaction using thematically-situational dialogue. Positive emotions activate the personal motivation and motivational strategy in learning. In Rusinova's research about the adaptive abilities of children at preschool age regarding the living conditions and interactions in kindergarten, the social adaptation of children aged 5-6 was found to be at the following levels: 25% have a high activity in adaptation, 67% have a medium level of their adaptive skills, and 7.5% have problems with adaptation.

The main purpose of the thematically-plotted drawing in art education in kindergarten is for the children to develop an ability to express their impressions of the surrounding reality using artistic methods. The development of the ability of 6-7 year olds to create a thematic composition is connected to the development of perceptions and analytic thinking. Through this development they are able to build this type of drawing, separating the important and the secondary in the plot and delivering the links between the separate drawn objects. This period of the children's drawings has been defined as one of intellectual realism by Lewis. He marks that "Progress is generally seen to be made by acquiring techniques and skills towards a "photographic" realism." (Lewis, J. 1996, p. 221) On his opinion "children usually want to give each item that they draw its own individual identity". (Lewis, J. 1996, p. 225).

The subject of children's drawings at the end of the preschool period is diverse and is connected to the interests of each child at that particular age. Generally, 6-7 year olds depict what intrigues them at that point in

time. These can be objects or scenes of the surrounding world as well as fictional heroes from books or movies. At that age children are also very interested in family matters as they understand the important role that the family has in their lives.

At this age, there is a great development in the way children produce the image of a human figure. In fact, drawings undergo a great change: they now have the particularization of the proportions of the human body, enriched with lots of details like nose, hair, ears, and clothes amongst others. The proportional ratio between the different depicted objects keeps building itself according to the emotional value the object has for the child rather than according to the actual size of the objects and their relation with each other. This means that the most important objects in the eyes of the child are the largest. The colours of the separate objects are depicted closer to the colours these have in real life, but colour is also used to depict the child's attitude towards a certain object.

The trend toward a more naturalistic use of colour reaches near perfection in the group of 6-8 -year-olds. Golomb (2004) gives an example:

Colours for the Garden theme are object related or "true local colours" and the outlines for humans are drawn with a single colour, preferably orange or black. Although most drawings are colourful, a principle of realism guides, as well as constrains, colour use. Thus, well-known attributes of the object dictate certain colour choices; for example, brown or blue eyes, red lips, yellow, brown or black hair. With the exception of the colour purple, which in our tasks is used sparingly, all available colours appear frequently, and appropriately (p. 137).

The rich decorative ornaments of certain objects are also connected to the level of attractiveness these objects have for the child. The spatial appurtenance of the objects is mostly depicted in a flat two-dimensional way, and only a few of the more observant children are trying to depict the third dimension in their drawings. The frieze composition continues to be the favourite compositional technique for most of 6-7-year-olds, although a few of them do try to build more complicated compositions.

These children are trying to depict their thoughts and feelings in a richer way in their drawings.

Golomb (2004) points out the importance of the theme in the thematic drawings of children. The drawings can convey the mood, the feeling/s, and a view of the event, despite the very obvious representational limitations that characterize child art (p. 154). The Golomb (2004) studies were designed to probe the child's competence to depict feelings: they have demonstrated that deeply-felt experiences and meaningful themes can attain a directness of expression that, despite its simplicity, is engaging and valued by the child as well as the adult. Expression resides in the total composition, with the theme determining the choice of characters, objects, and their arrangement. Even the simple arrangements young children make can convey complex feelings and relationships.

Based on the understandings of Golomb (2004) and Zians (1997) on the directness of expression, we organized a research with which we traced the relationships between same-aged peers who were in the final year of pre-school education. We analyzed and graded drawings of children aged between 6 and 7 years on the subject "Me and my friends in kindergarten" using Prout's methodology for "Kinetic school drawing" (KSD). The results from the research were then compared with Rusinova's (2006) research about the adaptive abilities of children at preschool age in connection with the living conditions and interaction in kindergarten.

When working on the theme "Me and my friends in kindergarten", the children were given the necessary materials to create the drawing. They were told that they could work and finish their drawing at their own tempo. According to the figures and the presence of a Me-figure we separated the drawings into four different groups. The first group comprises drawings with a lack of a Me-figure. Only 10% of the kids participating in the research did not include the Me-figure in their drawing (see examples in Figures 117 and 118).

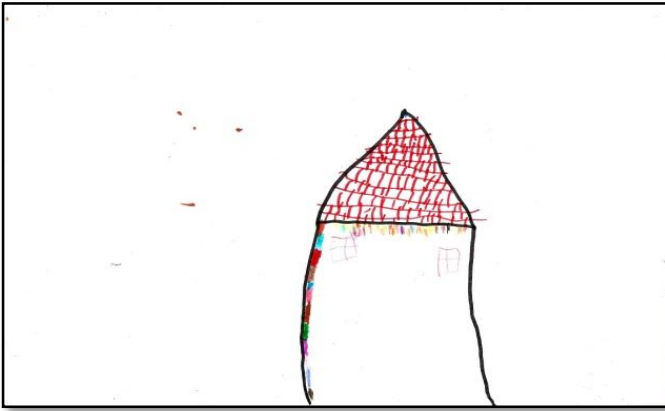


Figure 117 (top) & Figure 118 (bottom). Drawings on the subject “Me and my friends in kindergarten” by a child who did not include the “Me-figure” in the drawing

In the above drawings (Figures 117 and 118), the children have depicted only the building of the kindergarten. The avoidance of the actual theme reveals a discomfort in the environment depicted. Hence,

one can say that these 10% of the children lacked a good level of social adaptation in their group in kindergarten.

In the second group of drawings, represented below in Figures 119 and 120, we placed the ones that depicted only the Me-figure and some details about the interior or exterior of the kindergarten. The group included 35% of the researched children who depicted themselves alone in kindergarten.



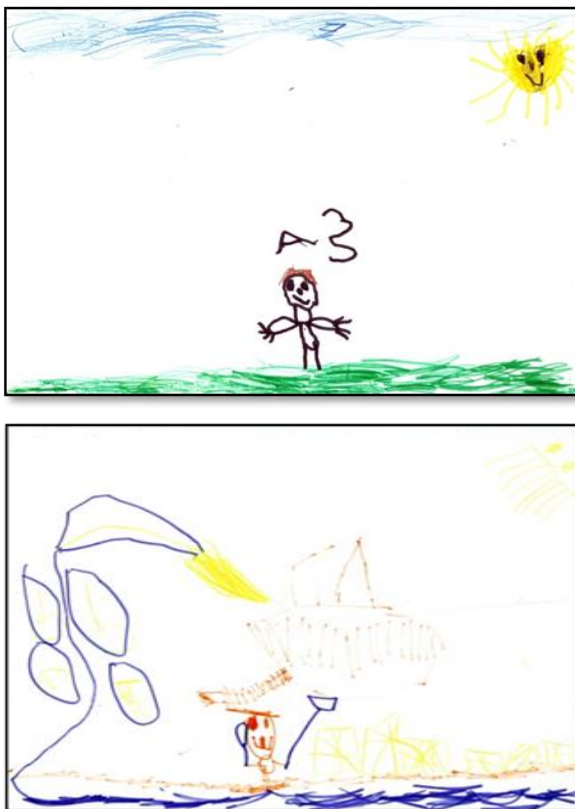
Figure 119 (left) & Figure 120 (right). Drawings on the subject “Me and my friends in kindergarten” by a child who did only include the “Me-figure” in the drawing

What is extremely interesting are the drawings of two children of the group who depicted more than one Me-figure. Figure 121 is the drawing of one of the girls who has drawn three Me-figures with each figure having the word “A3” written above it. Figure 122 shows the drawing of the boy with the two Me-figures. Both children have not depicted any other characters in their drawings.



Figure 121 (left) & Figure 122 (right). Drawings on the subject “Me and my friends in kindergarten” by a child who did include more than one “Me-figure” in the drawing

The presence of only one figure that the child identifies himself or herself with, speaks about a lack of a feeling of appurtenance and participation in the environment in kindergarten. The reason this happens is the self-centered thinking which is typical of the age. The type and size of the Me-figure is of great importance for defining the way the kids feels about themselves in the kindergarten community. Having a large, nicely drawn figure in the center of the paper sheet, filled with bright colours and with lots of details, shows a great egocentrism and a feeling of self-importance: concentrated attention is drawn towards the child's own desires and pretenses. These self-centred drawings made up 43% of the drawings in the “only a Me-figure” category, or 15% of all drawings. Those children who multiplied the Me-figure were also included in this percentage. The remaining 57% of this group drew only a Me-figure, and these made up 20% of all the kids who have drawn a small, monochrome figure, schematic, with almost no details, thus showing a strong feeling of abandonment and rejection as demonstrated in Figures 123 and 124.



**Figure 123 (top) & Figure 124 (bottom).
Drawings on the subject “Me and my friends
in kindergarten” by a child who only included
a small monochromatic “Me-figure” in the
drawing**

The third group of drawing comprised the 35% of children who drew themselves with only one friend from their kindergarten group. This is typical of 6-7-year-olds and is in line with the psychological feature related to the friendships at that age when they tend to get attached to only one child (see Figures 125 and 126).

In two-thirds of the drawings placed in this group, the Me-figure is equal in size to that of the figure of the friend as shown in the example in Figure 125. However, in the remaining one third of these drawings, the Me-figure is very much smaller than the figure of the friend as seen in Figure 126. This discrepancy in size may be because the children do not regard the friendship as being of great importance.



**Figure 125 (top) & Figure 126 (bottom).
Drawings on the subject “Me and my
friends in kindergarten” by a child who
included the “Me-figure” with one friend**

The fourth group of drawings have three or more figures, which is the closest to the actual situation in kindergarten, and shows a willingness to express it as realistically as possible. These comprise 20% of the researched drawings.



**Figure 127 (top) & Figure 128 (bottom).
Drawings on the subject “Me and my
friends in kindergarten” by a child who
included three and more figures**

In half of the drawings in this group there is also an attempt to draw some form of movement. The figures are linked to each other by a mutual activity as can be seen in Figures 127 and 128. Although the drawings are relatively static, which is a natural tendency when 6-7-year-olds are drawing a human figure, the postures and places of the figures make the composition a little bit more dynamic.

In general, apart from the drawings in this group, the figures in all the other drawings in this research are statically drawn. The issue of distance is given great importance when analysing children's drawings through the "Kinetic family drawing" and "Kinetic school drawing" tests. The level of affection between the children is indicated by the closeness or distance of the Me-figure to the other figures. Only one of the drawings, seen in Figure 129, shows the Me-figure as being part of a group of figures without a large distance between them.



Figure 129. Drawing on the subject "Me and my friends in kindergarten" by a child who placed the figures close to each other

If the drawings with only a Me-figure, with no Me-figure, or with no figures at all are interpreted as a symbol of detachment and isolation from the environment of friends and classmates, then it can be seen that a great part of children that age feel that way in the school environment. We can depict those results in the following way:

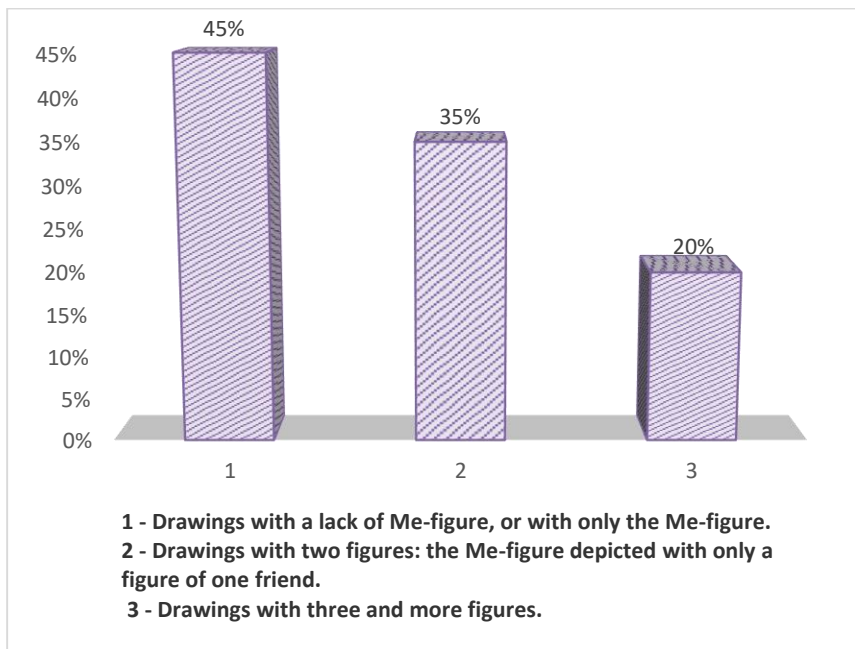


Figure 130. Percentage distribution of the drawings by the number of the depicted figures

By summarizing all that information from the analyzed thematic drawings of children aged 6-7 years, we can see that almost half of them (45%) show a low level of social adaptation in kindergarten, although they have been visiting it for the last 4 years (see Figure 130). At 35%, about one third of the children have depicted an interest in only one friend from their kindergarten environment. According to the psychological features of the age, this is the normal level of interest towards a social

environment outside the family. Only 20% of the researched children have shown a high level of social adaptation in their drawings as indicated in the third column in Figure 130. These findings are similar to those obtained by Rusinova (2006). What she reports is that a very small percentage of the children at that age showed a good level of social adaptation, while there was a very large percentage of students who demonstrated a lack of adaptation to the social environment.

This lack of social adaptation can have some of its roots in the use of technology. A survey of more than 1,000 senior primary school staff carried out in the UK in 2016 by The Key, an information and advice service for head teachers, revealed that thousands of four-year olds were starting school with poor “social skills”, speech problems and lack of self-help skills. Primary school teachers attributed the inability of children to hold a conversation not only to challenging family situations but also to parents’ lack of interaction with their children. In their opinion, parents were often seen on the phone rather than talking to their children.

Drawing is a proven way of how children share information of their reflections of their knowledge and attitude towards the world in a graphic way. Muhina (1981) defines the “creative activity of the kid as a form of gaining social experience”: through the assimilation of this experience in children’s drawings we can “read” the messages they send us about their social experience and their level of connectedness with the environment they are living in. The low social adaptation of 6-7-year-olds to the school environment may be mainly due to the fact that some classes are dominated by a technological focus in children’s playing and creative activities. This leaves little room for social and personal interaction.

5.4 Plot drawings showing some children’s different traumatic experiences.

A good understanding of children’s drawings and the stages of their development in childhood is of important to be able to decode their meaning. As has been shown above, various authors including Goodenough, Machover, Koppitz, Hammer, Burns, Kaufman, and Prout, have devised various methods for decoding children drawings. When one

analyses the different components of these methods, one can find many similarities. Thanks to this knowledge we can build the capacity to understand the messages in children's drawings without being tied to one specific methodology. Details like the composition, the place where the images are situated on the sheet of paper, the space relations between the objects, their sizes and proportions are all very significant components in the analysis of plot drawings. Other aspects which need to be taken into consideration are the size of the figures and the depicted details including their number and type and the colour/s which have been used. Moreover, all the components of the drawings which have been identified in this monograph are also important when looking and analysing plot drawings as depicted by children.

It is important that the analysis of plot drawings is not done in isolation. By definition a plot is the order in which things move along and happen in a story. So when we talk about plot drawings in children's art activity we mean the order in which children depict the events and scenes in their thematic drawings. When considering plot drawings, it helps to be aware of any previous drawings the child has created and the way these were composed. It is also important to know the child's favourite subjects and themes and the colours of preference. It also helps to know the emotional background accompanying the drawing process on a certain subject and the emotional condition the child is in at the moment of the creation of the drawing. Emotions can be behind the reason for depicting a certain type of expression in a specific drawing.

Figures 131 and 132 show the drawings of a 6-year-old girl which were created on the same day in a domestic environment. The first drawing to be created is the one shown in Figure 130. In this drawing we can see a well-balanced frieze composition, the sheet of paper has been well filled up, human figures are large enough and have enough details on them, and the colouring is vibrant and bright. After finishing this first drawing, the child started to work on the next drawing shown in Figure 131. She started with drawing the tree which can be seen smiling and the child used colour to depict it. After this, as she began to draw the bird, her mother started yelling at her to reprimand her for some mischief she had gotten up to sometime before. The reaction of the child can be very

clearly seen in the drawing with the depiction of sad figures whose mouths are shown with lines curved downwards. The Me-figure and that of the mother are also sad as are the cloud and the bird. The drawing is left with only black contours: there is no colour and on the tree we can see some shading and scratching.



Figure 131. Drawing by a girl at the age of 6, on the same day she created the drawing on figure 132

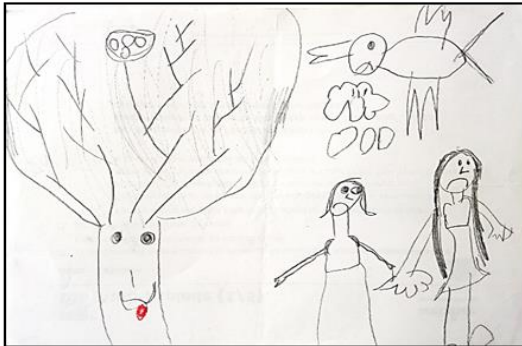


Figure 132. Drawing by a girl at the age of 6, on the same day she created the drawing on figure 131

Figures 133 and 134 below show two drawings of a 10-year-old girl. In the first drawing – Figure 133 – she depicted “A game with friends”. In this drawing the figures are large enough, they are arranged in a frieze composition and we can clearly see the communication between them. The girl used enough bright and saturated colours which correspond to the colouring of the real objects (blue sky, green grass, yellow sun, skin colour of the faces etc.). In the second drawing, shown in Figure 134, the same girl has depicted “My fears”. In this drawing the composition is chaotic: there is no clear connection between the different objects and no proportional relation between them; three of the depicted objects - the TV, the car and the face of the child – have been scratched over as a sign of a negative attitude of the child towards them; and, there is no colouring. After finishing the drawing, the child described her fears to the psychologist: “I’m afraid of cars because people often tell me to be careful when I am going outside alone because I could get hit by a car. I’m afraid of the TV because I often see things on the television that I do not understand and this scares me.” This drawing also shows her fear of sickness: the balloon next to the girl has “sick” written on it.



Figure 133 (left) & Figure 134 (right). Drawing on the subject “A game with friends” by a girl at the age of 10

The three drawings combined in Figure 135 were created by an 8-year-old boy who lived in a harmonious and supportive family environment. Judging by the large-enough figures, the boy's positive self-esteem was evident. The child included a significant amount of detail in the parts on the human figures, and the good proportions between them are a sign of curiosity and good intellectual and cognitive development. We can see rich and saturated colouring in combination with calm and confident outlines. The symbols of love the child added confirms the positive emotional background which dominated the boy's feelings.



Figure 135. Drawing by an 8-year-old boy who lived in a harmonious and supportive family environment

Unfortunately, this same boy was to have a very traumatic experience after which he refused to draw for a couple of months. An activity which he had previously loved so much was suddenly turning into something he was reluctant to do. The very act of refusing to draw is one of the ways of expressing traumatic experiences which is underlined by those seeking to understand children's drawings.

The traumatic experience for the child happened on a school trip on a particular day dedicated to talent. The boy chose to show his talent in Aikido – a sport he was practising at the time - by demonstrating various postures. However, this demonstration was met by whistling from a group of children who made fun of him publicly. The child felt humiliated: he did not dare to cry; he did not know how to react; and, he developed a headache. After this episode, he developed very severe tics usually blinking. He was diagnosed with tic neurosis and was prescribed large doses of psycholeptics. Although there was some improvement with the tics, his concentration and memory still suffered.

The two drawings shown in Figures 136 and 137 were created by the same 8-year-old boy three and a half months after he experienced the emotional trauma. He started to draw under the guidance of an art teacher on the insistence of his mother. The drawings he created were in the comics style. In the drawings there are two main characters – the Me-figure and a friend who looks like a snail. What is impressive is the enormous regression in the drawing of the human figure, possibly influenced also by the psycholeptics he had been taking. The boy no longer showed the analytic representation he used to show before. The parts of the body are not proportionally drawn and there is a lack of accuracy when depicting details as can be seen in Figure 136. What is also typical of children in such situations is the unwillingness to work with colour. The drawing is created only with black contours.

The plot and the characters in the drawing in Figure 136 are more positive than those in Figure 137. The text in the dialogue between the characters reveals the desire to achieve a friendly relationship between them. Despite the fact that the boy chose to draw the friend as a snail and hence “unattractive”, the snail can be defined as neutral. It has been noted that children's drawings of different animals are thematically separated. For example, the rabbit and the ant denote feeling “threatened”; the lion, wolf and rhinoceros denote being “threatening”, while the squirrel, snail and cat are seen as being neutral.

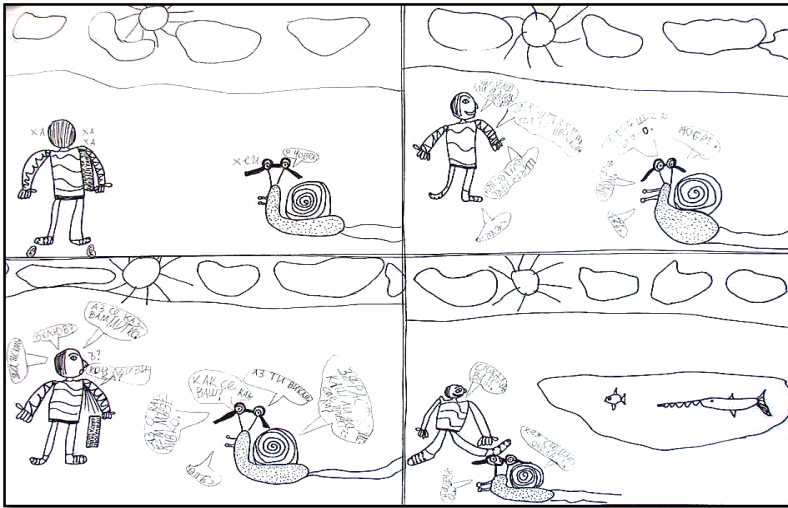


Figure 136. Drawing by an 8-year-old boy who lived in a harmonious and supportive family environment after a traumatic experience

The same boy's drawing in Figure 137 has many sharp edges, teeth and claws. All these details together with the way the lines are depicted with their sharp edges and pointed angles are a symbol of aggression. This way of showing the characters can be a reflection of the boy's feelings towards the school environment and is probably connected to his bad experience at the school camp. The Me-figure is shown at the bottom part of the sheet of paper which means a feeling of insecurity and defencelessness, very much as a baby would feel, in this environment. The main threat for the 8-year-old boy is the figure of the friend who is right next to the Me-figure. The characters at the top section of the sheet of paper are saviours and patrons. Their appearance reminds us of the popular comics images of the famous super heroes. Their appearance in the drawing is an expression of the desire for support and safety.

We can also notice a worrying detail: in both drawings the feet of the Me-figure are drawn with a curved line and so become flippers. This way of representing feet is connected to a lower intellectual level and is a sign

of lowered cognitive functions. In the drawings the boy created before the traumatic experience, shown above in Figure 135, the feet of the characters look completely different as they had shoes with heels, and the feet and footwear were clearly defined.

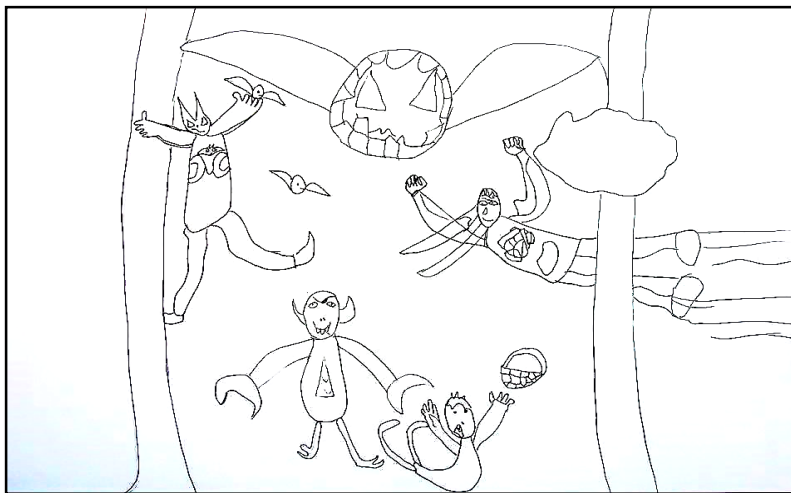


Figure 137. Drawing by an 8-year-old boy who lived in a harmonious and supportive family environment after a traumatic experience

Plots in children's drawings can look extremely different depending on the time they have been created. When children feel calm and happy their drawings include a lot of positive characters, bright colours, calm lines, balanced composition and are filled with positive symbols. On the other hand, plot drawings which children create after a traumatic moment in their lives are usually filled with unhappy, aggressive characters and are painted in dark colours. The lines are uncertain with changing thickness and direction.

Chapter 6. Conclusion

A good knowledge of children's drawings is a significant form of communicating adequately with children. Firstly, this knowledge begins with learning the different characteristics in drawing development at different ages and stages. Secondly, it involves becoming acquainted with the different methods, created and developed by authors from different professions, schools and nationalities, which can be used to evaluate children's drawings. As Golomb observes:

Drawing in the presence of the therapist encourages the child to understand his own message. This may enable him to become more active in his own behalf, to pursue an attainable goal, to gain greater self-respect and, ultimately, to feel better about himself. Above all, drawing in the presence of an accepting adult encourages the child to face the inner world of ghosts and demons, as such a confrontation is now less threatening. The threats that emanate from the child's private nightmares, the thoughts and images of punishment and of destruction that lock her into her gloomy world, can become more manageable and subject to change once they find their concrete expression in a drawing. However, a drawing does not provide solutions magically, and in most therapeutic situations drawings are seen as aids in the working through of the child's emotional problems (Golomb, 2004, p. 320)

It is also important to note here that when interpreting children's drawings, they should be tentative and further elaborated and moderated through client feedback. Moreover, it must not be forgotten that these methods can only reflect the feelings, emotions, and experiences of the children at the time while they are in the process of making their drawing. It is recommended that all diagnostic drawing methods are used as an additional technique for researching children's personality. And it is important to underline that it is not possible to reach a conclusion about a child's personality based on these methods alone. In order to gain a deeper understanding of the child's feelings and experiences we need to

track the drawing development process and its components for a longer period of time.

Accumulating knowledge and information in this area should be accompanied with empirical investigation of the drawings of children. It is only in this way that the knowledge we gain can be fully and truly understood and will enable us to delve deeper into the meanings behind what children share in a graphic way.

There are many who oppose using children's drawings for psychological research. I have intentionally given this issue attention in this publication. It has to be acknowledged that there are authors who do have convincing reasons for criticising theories about the interpretation of drawings, but it must also be acknowledged that there are positive and negative sides to every method. At the beginning of my career, I myself was sceptical about using drawing methods when researching children's personalities. But when I began using these methods in practice and combining them with deeper insights and understandings of children's drawings, I became convinced of their effectiveness. It is important to note that the use of drawing methods to understand children's personalities works better when it is used as an additional instrument together with other research methods.

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This book is for teachers, school and children psychologists, parents and everyone who has an interest in the development and understanding of child art. The examples provided throughout this book are entirely taken from my personal practice in my work with children in the fine arts field. For almost 20 years I have collected, looked through and analysed children's drawings. I have trained children to draw and have been learning from their drawings and the experiences which they readily and sincerely share through them. The strong emotional load which the drawings carry convinced me in the credibility of the messages which children put in them.

Knowing the stages of child art development is the basis of understanding and analysing children's drawings. The combination of my personal experience from my work in art education and that in therapy have led to a significant depth in their interpretation and adequacy of their understanding. In my experience, a good understanding of children's drawings can guarantee a more thorough insight in their world which they share in the graphic images in their drawings.

