CHAPTER 7

PERFORMANCE MEDIA

1. INTRODUCTION

In discussing performance media, it is emphasized that all such media really should be viewed as **observation media** and that from the moment of acquaintance, the child has to be observed pedagogically because no gesture, remark or action is insignificant (see 77, 40). The following media are particularly appropriate for observing the child's intentional going out to the world.

2. THE "GUIDE-IT"

This medium consists of an almost square board of approximately 4 1/4 by 4 1/2 inches with a rim on three sides and a hole in the middle, and it is mounted on a stand 3 1/2 inches high. The side without a rim is connected to a small board 4 1/2 inches wide and 13 1/4 inches long with a rim on each side which slopes downward almost to the bottom. This skew board contains smaller strips of wooden barriers which lie transversely or with a corner obliquely to the top as well as a few small round holes. An iron marble is placed at the bottom of the transverse board which has a rim while a 6 inch long wire with an eye at the end is given to the child and he is asked "What do you think you can do with this?" The objective is to see if he will conceive the idea himself of pushing the marble with the wire (which has an eye or loop at its end) through the barriers to the top of the horizontal board so that it falls through the hole.

If the child does not discover this himself, he is helped to push the ball a little way up and it is then left to him to complete the task, that is if he understands the objective. In any case, his behavior is accurately observed and special attention is given to the following: does he arrive at the insight himself that the marble can be pushed with the wire through the barriers to the hole above? Does he accept help? What is the state of his fine muscle coordination; of his left or right handedness; directedness; enthusiasm; how is he influenced by failure?

3. THE "PASSALONG"

This medium is a subpart of the **Alexander Performance Scale** whose primary aim is to evaluate the child's practical intelligence. However, the **Passalong** also is extremely appropriate as an **observation medium**. Among other things, attention is given to a possible passive approach and trial-and-error methods instead of planning and also if there is evidence that the course of thinking rises.

4. THE KOHS BLOCKS

This medium also is a subpart of the **Alexander Scale**. Originally it was designed by S. C. Kohs (see 110, 77) but later a number of modified forms were offered. Here 16 one inch cubes are used where each cube has a red, yellow, blue and white side, and a diagonal red-white, and a diagonal blue-yellow side. In addition, there are six cards of colored geometric figures which the child has to reproduce with the blocks. From card 1 to 6, the patterns increase in difficulty. In particular, attention is paid to whether the child merely puts the blocks alongside each other, if he works by trial-and-error methods or if he works methodically and with a plan.

There are a number of variations of pattern construction media such as the Goldstein-Scheerer stick medium (73) where the child is asked to lay out such stick-figures himself according to the models of stick-figures presented to him.

5. THE "WIGGLY BLOCKS"

The **Wiggly Blocks medium** consists of nine sawed wooden blocks, divided by four curved band-saw cuts. There are four **corner** blocks, four **side** blocks and one **middle** block. It was originally designed by J. O'Connor (186) who viewed it as a selection medium regarding a person's **technical thinking**, to "measure" the spatial "ability to form images, to determine if "one can imagine the essential structural relationships" according to Van Gelder (287, 139).

Especially in the U.S.A. there was an attempt to remove the subjective from observations and interpretations and the **Wiggly Blocks** became an **achievement test** for primarily determining how **long** it takes a person to put the pieces together. There was a search for particular "factors" that are significant to this "building"

activity and what then holds for all "building" activities regarding this medium.

Ouweleen (188) describes the development of this medium from an **instrument for measuring** spatial representation to an **observation medium.** At present, in the Netherlands (see 97, 20) and in South Africa, it is widely applied as an observation medium.

Although it also is used to evaluate a child's **practical intelligence** (see 95, 63), in an orthopedagogic evaluation it is implemented only as an observation medium where the point of departure is the situation as a whole. Thus, in the first place, this does not have to do with the child's proficiency as such or determining the amount of time (using a stopwatch) it takes him to complete the task. Rather, it has to do with his ability to **synthesize.**

Regarding the use of this medium, the investigator explains to the child how the blocks are designed, how the different parts came about and that there are blocks with a straight side and others with wavy sides. The blocks then are taken apart before the child and he is asked to put them together again. Joubert (95, 61) notes that an analysis of the structure of the blocks by the orthopedagogue and the child, and a discussion of how it is formed by sawing and the number of blocks that thus have been created, the number of flat and wavy sides, etc. occur for a two-sided aim: on the one hand, the child is familiarized with the performance material and, on the other hand, the investigator attains insight into the ways he is able to acquire insight into the material (see also 188, 85, 86).

With respect to the performance situation, the child finds himself in a **task situation.** He lived experiences particular problems, successes or failures, and in his own ways he has to respond to the difficulties he lived experiences.

By observing and interpreting his **responses** to this situation, an indication is gotten of his **approach, lived experiences, etc.** (see 95, 63). Joining with Joubert (95, 63) it is indicated that this medium in particular lends itself to observing the child in his **I-piece of work situation** and in his **I-piece of work-society situation**, by which is meant his response to the task in the present under the view of another person.

Regarding the **I-piece of work situation**, the appeal, as task, which the child encounters is repeated each time he becomes "disillusioned" because he is not yet able to reconstruct the "familiar" structure of the block, and he usually discovers that it really is more difficult than he initially expected. He also can't discover this aim because the block still asks for completion and he is thoroughly captivated by the task (95, 63).

Concerning the execution of a task in the presence of another person, he lived experiences that his performance is being judged. The fact that he lived experiences that he is judged and that he "has to" complete the task, implies that, on the basis of his wanting to be someone himself, he does not want to fail.

Since the child has a very good grasp of what he has to do, and lived experiences that he is judged, getting stuck also is a lived experience of failing as a **person,** and that he cannot show what he wants to show. Thus, the orthopedagogic evaluator also has to observe how he behaves if he gets stuck. An indication is gotten of his attitude toward his own performance and if the mistakes he makes lead him to greater accuracy, quickness, sharpened attending and more insight.

If he no longer adheres to the idea of the task, he can become extremely uncertain because then he no longer always understands the purpose of the task.

With respect to the building activity itself, attention should be paid to the following: Does he repeatedly put the corner blocks on the middle block? How quickly does he discover that the side blocks can be put only on the middle block? Is he aware that the flat sides can only be on the outside? Does he turn the blocks so they don't fit? Does he look for correspondences with the sawed (wiggly) cuts? (see 95, 61; 174, 104). In addition, it is noticed if he involves himself with building layers instead of building the whole block, and if, perhaps, he only tries to join isolated blocks with each other, i.e., how readily he loses sight of the real aim, in contrast to where he first builds a stratum as an integral part of the whole. Thus, it is important to evaluate each action in light of the ultimate aim.

In addition to these few media discussed, there are also a number that are designed to gauge the state of actualizing the modes of

specific aspects of the psychic life such as perceiving, sensory perception and motor skills.

6. FORM AND PATTERN MEDIA

6.1 Form Boards

Usually these media consist of rectangular boards in which different figures are cut out. The child is asked to put the cut out figures back in the board. There are boards from which simple figures have been cut such as a circle, square, rectangle, triangle, star, etc. Most of the form boards are produced by Stoelting of Chicago.

Also, the child can feel forms without seeing them and then be asked to draw them. Included here are also a great number of jigsaw puzzles where he has to construct a whole from various parts.

6.2 The tactile-motor medium of Werner and Strauss (319, 244-245)

This medium consists of two sets of boards. One set consists of three boards on which the background is formed by rows of ordinary nails. Three figures (a square, an oval and a triangle) are introduced into this background with oval-shaped tacks (somewhat larger than the nails). The second set consists of three boards of the same figures that are introduced in solid forms on a smooth wooden background.

With respect to both sets, each board is presented to the child so that the figure is away from him and out of his line of sight while he is asked to touch the surface of each board with his fingers as long as he want to and then draw a picture of what he has felt.

Regarding the first-mentioned set, Werner and Strauss have found that brain-damaged children very easily become confused by the diffuse background while the background presents no problem for the non-brain-damaged child and the forms are easily distinguished (see 319, 244-245).

6.3 The alabaster board of Strauss and Lethinen (249, 31 et seq.)

This medium is implemented in particular to determine if the child is able to fathom the structure of a form. It consists of two identical square cardboard boards approximately 11 inches square. Each board has ten rows with ten holes (4/10 inch in diameter) in each row. The interval between holes from midpoint to midpoint is one inch.

There are 50 black and 30 red alabasters with which the investigator constructs particular patterns on one board which the child has to reconstruct exactly on the other board (see 249, 32). After the child has reconstructed a particular pattern, he also is asked to draw it. Here special attention is given to the direction in which he draws the lines. According to Strauss and Lethinen (249, 33) there usually are one of three approaches by the child noted during his involvement with the task:

a) An orderly and successive way where the alabasters are placed one after the other in a row. Usually this is seen in younger children and intellectually retarded.
b) A discontinuous and disconnected way which especially is a consequence of brain damage.
c) A constructive method where the child goes to work in a systematic and planned way. This is usually encountered with children who possess good visual-motor abilities.

In addition, there are media directed to the functioning of particular senses.

7. MEDIA FOR EVALUATING SENSORY PERCEPTION

7.1 Visual perception

A great variety of media are available for evaluating the child's visual perception. As examples, the following can be mentioned: Eisensen medium (58), Color sorting medium of Goldstein and Gelb (72), the Benton medium for visual retention (17), the Goldstein and Scheerer Stick medium (73), Ellis Visual design, Vedder-figures, Graham-Kendall Memory for design medium (78), Bannatyne Visuo-spatial memory test (8, 599; 9, 47), Benton Test of Retention (17), Frostig Test of Visual perception (67; 68), Haworth's Primary Visual Motor Test (83), Beery's Developmental Test of Visual Motor Integration (10), Ayres Southern California figure-Ground Visual Perception Test (6), Witkin's Embedded Figures Test (320), Hooper's

Visual Organization Test (920 and the well-known Bender-Gestalt medium (16).

Some remarks will be made about the last-mentioned medium also to illustrate the usefulness of the other media mentioned.

In building on Gestalt theory, Wertheimer (see 16, 3, 4) designed figures of little stars, circles and lines to research the visual perception of gestalts (forms). With reference to these designs, Lauretta Bender assembled the Bender Gestalt medium (16). It consists of nine figures drawn on an individual card and is qualified as a **visual-motor** medium because the child has to **copy** the figure he **sees**.

Elizabeth Koppitz (140) shows how the state of a child's visual-motor perception can be determined with the help of this medium and how indications can be found regarding his school readiness, cognitive potential and the possible presence of learning problems, brain damage, etc.

Thus, e.g., an indication of possible minimal brain dysfunction can be manifested when the following tendencies arise with respect to the child's copied figures (see 104, 70-95):

a) Extra angles (corners) are added or some angles are missing;
b) angles in place of curves;
c) straight lines in place of curves;
d) disproportionate subparts;
e) substitution of stars with circles;
f) rotation of design by 45 degrees;
g) subparts not integrated;
h) circles are left out or added;
i) distortion of the design;
j) lines in place of stars; and
k) perseverations.

Regarding the child's involvement, the following actions, which indicate possible minimal brain dysfunction, also can be observed (see 104, 70-95):

a) Each time, the figure is first traced with the finger before it is copied;

b) the finger serves as a base with each new part that will be copied;
c) after a few glances, the card is readily put aside and memory is relied on and it seems as if the child appears to be confused by the card and then avoids looking at it again;
d) the card or drawing paper are rotated;
e) the drawings are impulsive and hasty, there are many erasures, and great effort redrawing without any real improvement; and
f) the child takes particularly long to complete the task since parts instead of the whole are the point of departure.

7.2 Auditory perception

This matter often is ignored during the investigation even though several simple media are available by which an indication can be gotten of the child's auditory perception (see 317). These media are especially designed to discover hardness of hearing in younger children (see 54, 51) such as the **Listening** medium of Van der Horst (276), the **Auditory Discrimination Test** of Wepman (317), the **Investigation of Auditory Discrimination** test of Crul-Peters (192) and the **Auditory Analysis and Synthesis Test** of Rispens (209, 128 et seq.). Regarding the orthopedagogic evaluative investigation, use can be made of **whisper speech** and also of pairs of words whose pronunciations are very similar to each other. The child is asked to repeat the words after they are said to him loudly and clearly while the investigator's mouth is out of his sight. The following are some examples: cat, cap; pork, cork; pat, pet; pen, pin' shake, shape; web, wed; tall, tell, moon, noon.

In addition, the child can be asked to repeat rhythmic patterns that the investigator taps out on the table with a pencil, while the child's eyes are closed.

8. DEXTERITY MEDIA

Various media also are available by which one can get an indication of the child's dexterity such as, e.g., taking out blocks and putting them back in the correct places, turning s screw, putting pins in little holes, etc. (see 110, 86; 77, 74). There is special attention given to the quality of his motor activities in terms of the ways he acts and the nature of the errors he makes.

9. MEDIA FOR EVALUATING SPATIAL ORIENTATION, SENSE OF DIRECTION AND DOMINANCE

9.1 Introduction

As the center of the child's actualizing his psychic life, his body also is the point of departure for his spatial orientation and sense of direction. The things outside of his body are spatially **ordered** and are brought into orderly relationships through perceiving from one's bodiliness. Thus, e.g., the direction of things in space is determined by visual perception (see 187, 187; 77, 75).

Effective spatial orientation and a sense of direction require a sufficient left-right orientation. Especially with children with specific learning difficulties, Olivier (187, 188) finds their the left-right orientation often is still not properly differentiated and that cross-dominance (i.e., right-eyed and left-handed, or the other way) often is present. Various other researchers (82, 3; 251, 48, 55-56; 321, 108-111; 168, 2, 33-34) have found a high correlation between dominance disturbances or confusions and learning problems.

9.2 Exploring left- or right-handedness

The attention of the investigator usually makes implementing media for determining handedness superfluous. While the child is involved in the performance media and when he writes, attention is given to which hand is given preference or used. When he writes or draws, attention also is paid to the slant of the paper. With a right-handed person, the paper slants to the left and for the left-hander to the right.

However, he also can be asked to carry out specific activities and movements where he has to use his hands. Thus, he can be asked to throw a ball, to catch it or pick it up with one hand; to cut with scissors, to put an alabaster (marble) in a hole on a board, put pins back in a small box, etc.

If the child gives preference to his left hand and also performs better with it, this indicates an original left-handedness. However, better performance with the right hand does not necessarily indicate an original right-handedness because he grows up in a right-handed world and really is encouraged to give preference to his right hand. Therefore, it is important to determine if the same preference also

is given to the use of the feet. Let him stand on one foot, kick a ball, hop on one leg. The leg to which he gives preference usually is that which originally is the dominant one.

9.3 Exploring right- or left-eyedness

The child can be asked to make a circle with his thumb and forefinger, to close one eye and with the open eye to aim through the circle at an object held be the investigator. Ordinarily, he will form the circle with his dominant hand and aim with his dominant eye.

Also, an ordinary sheet of paper can be taken and a small hole of approximately 2 inches cut out of the middle. Let him stand about 10 feet away and ask him to hold the paper at arm's length in front of him and ask him to aim through the hole, with both eyes open, at a pencil that the investigator holds vertically. Then he has to slowly move the paper toward his eyes. The investigator can see at once the child's dominant eye through the hole, and he will also move the hole to his dominant eye (see 40, 94-95). Notwithstanding the media described by Kahn and Griffin (96, 68), which can be used in this regard, the **ABC Vision Test** (160) also is mentioned (see also 82).

9.4 Exploring the child's bodily orientation and sense of direction

This has to do with the orientation of one's own body as well as the orientation of another person's body.

Let the child alternately touch with his right and left hands his right ear, his left ear, left eye and also other parts of the body such as his shoulders, knees etc. Following this, while the investigator stands in front of and facing him, he can be asked to indicate where the investigator's left ear, right leg, etc. is.

Many additional variations can be thought of by the investigator for gauging the child's confidence regarding concepts such as **above, under, behind, in front of** with reference to himself. Here it can only be mentioned that regarding cross reference to the parts of his own body, usually he is not able to do so before seven years; and with respect to right and left references to the parts of another

person's body, he doesn't succeed before 10 years (see 40, 96 et seq.).

9.5 Exploring the child's motor skills

Exploring the child's motor skills is important because they are closely related to perceiving. Inadequate motor skills usually lead to a defective spatial orientation and the underactualization of personal potentialities. For these reasons, the motor skills should not be isolated as independent entities (see 77, 71-72).

There are **distinctions** made among fine motor, gross motor, eye-hand coordination and eye movements.

Fine motor movement and coordination are preconditions for a number of skills such as, e.g., writing clearly. Therefore, good handwriting, as such, also is evidence of good fine motor movements. A number of actions can be assigned to the child to evaluate his fine motor skills such as cutting out a small picture with scissors, coloring in a picture, copying a little picture through transparent paper, running a string through some colored stars, opening a book's pages one by one, tying his own shoelaces, etc.

Usually a loss of the child's gross motor skills is conspicuous in his bodily attitude and movement. With the aim of closer investigation, he also is asked among other things to walk a straight line; to hop on one leg without losing his balance; walk heel to toe; stand on one leg for at least 20 seconds while holding his arms stretched in front of him; balance himself on a balance beam (see 187, 190).

Regarding his eye-hand coordination he can be asked to catch a ball with one or both hands and observe whether his eyes "follow" the ball while it moves **slowly** in his direction; to catch a ball directly in front, to the right or left of him, etc.

Because smooth, regular **eye movements** from left to right, from up to down and in a circle along with a broad eye span are necessary to learn to read easily and to also master other learning proficiencies, it also is necessary to determine their state with the child.

With the help of a round, shinning small ball on the end of a thin small rod, the child's eye movements can be observed. The ball is

held approximately one foot, at eye level, directly in front of him and then slowly moved approximately one foot from left to right. It is noted whether hi eyes follow the ball in one smooth, flowing movement and if there perhaps is not a "flicker" when his eyes cross the midline of his body.

The ball should also be moved in a circle from left to right and right to left in front of his eyes and it has to be determined whether his eyes follow it in a smooth, flowing movement or in jerky movements. In addition, the ball is moved nearer to and farther from him at the midline between his eyes to see if they turn in and out (see 187, 191). Olivier (187, 191) has found that children with specific learning problems cannot properly carry out these activities.