CHAPTER 2

THE AUTISTIC CHILD'S ACTUALIZATION OF LEARNING

2.1 INTRODUCTION

In the first chapter it was shown that LEARNING and BECOMING are two equally original structures that are ways in which the psychic life of the child-in-education is manifested. The adequacy of this actualization is closely related to the degree to which the child succeeds, thanks to educative accompaniment, in proceeding to self-actualize his learning and becoming. In the present chapter the actualization of learning by the autistic child is considered more closely in order to determine if an adequate realization of learning occurs and, at the same time, if it is under-actualized to indicate where that under-actualization lies. The actualization of the following modes of learning by the child under the educative accompaniment of the adult will be considered:

1 Sensing
2 Attending
3 Observing
4 Perceiving
5 Imagining
6 Fantasizing
7 Thinking
8 Remembering
9 Actualizing intelligence

2.2 THE MEANINGFUL CONNECTION BETWEEN LEARNING AND BECOMING

Once again it is necessary to indicate that these two ways in which the psychic life of the child-in-education is manifested, in their original structure, are not separable but at the most are distinguishable for the purpose of pedagogical illumination. Basically, learning is a phenomenon of becoming in that it is a precondition for it. Thus, it is correct to say that as the child

LEARNS in terms of learning contents, he BECOMES, and as he BECOMES, he LEARNS.

2.3 WHAT IS LEARNING?

Learning is a genuinely human phenomenon that is not reducible to any other (1 p 66). Thus, learning is not equivalent to training, such as an animal, and also it does not occur mechanically because a child decides himself if he will learn or not. Learning also does not qualify as a natural-scientific, biological "process" or follow fixed laws, rules or defined prescriptions (2 p 17).

The phenomenon of child learning is present from the beginning; i.e., from an early age the child is placed in the world learning and is under the imperative to realize his given *learning potentialities*. According to Ferreira (3 p 114) learning is essentially an existential phenomenon, a question-answer playing with the world by which form is given to his intentionality as a standing open for and directedness to fellow persons and things that surround him (what must be learned as content). Very early in his life the child discovers his ignorance and on the basis of his directedness to fellow persons as well as a meaning-seeking, meaning-disclosing, meaning-giving directedness to reality, he actualizes his learning potentialities by means of sensing, attending, observing, perceiving, imagining and fantasizing, as well as thinking and remembering that are all borne by the child's intelligence and possessed language (4 pp 63-76).

The learning phenomenon finds its child-anthropological foundation in the so-called principle of emancipation (Langeveld), i.e., a child is someone who wants to be and will become someone himself (5 pp 48-49). By this, the child proclaims himself as someone who is eager to himself grow up, someone who himself takes the initiative in actualizing his learning and becoming. As such, the phenomenon of learning by the child can also be seen as an integral principle of becoming, since, because of his willingness-to-himself-learn, he is someone who wants to become.

However, the initiative to learn implies effort because learning requires the active participation of the child and not the passive undergoing of "stimuli" from his environment.

Also, learning in no sense is a purely cognitive matter, and therefore the learning child must be approached as a totality-in-function who acts out of his specific lifeworld. Learning is indeed taking a personal position by the child and this implies that it has affective, willing, striving, cognitive, didactic-pedagogical and normative moments that all co-define its effectiveness; in addition, learning is realized in terms of specific *learning contents*. A readiness to learn is rooted in a stable affective life, the result of a stable, trusting educative relationship between the child and adult(s). Although this initiative to learn is an essence of child being [and of being human], its full-fledged figuring forth is a matter of educating (a matter of educative teaching and schooling). The adult involves the child in his educative teaching spontaneously (home) or more purposefully and formally (school) because in the child's potentiality to learn he anticipates the actualization of his becoming adult; thus educating, learning and becoming are basic givens in the life of the child and are the foundation for his becoming adult (7 p 101).

A child learns because of his participation in a situation (Langeveld) and he actively directs himself in his openness to the data (contents) that speak to him when he gives sense and meaning to them, i.e., when an exploring, acquiring and mastering of reality (content) occurs (8 p 101). The child also shows himself in the learning situation as someone who accepts co-responsibility for his learning and becoming because he opens himself to reality. Without this self-unlocking and the adult, in his turn, unlocking reality for the child (an event of double unlocking according to Klafki), the adequate realization of learning and becoming cannot occur (9 p 102). If the child succeeds in making the unlocked *contents* his own, i.e., learns it, his change (becoming adult) is seen in his inceasingly behaving as an adult.

In light of this brief grounding of childlike learning, the learning event of the *autistic child* can be seen from a psychopedagogical perspective in order to determine its nature and adequacy.

2.4 THE ACTUALIZATION OF LEARNING BY THE AUTISTIC CHILD-IN-EDUCATION

2.4.1 Introduction

The following modes of learning, as modes of actualizing and as essences of the phenomenon of learning, are discussed in order to better understand the actualization of learning by the autistic child:

(1) Accompanying modes of learning

sensing
attending

(2) Gnostic-cognitive modes of learning

observing/beholding
perceiving
imagining and fantasizing
thinking
remembering
actualizing intelligence

Before attention can be given to the modes of learning as such it must be emphasized that in its *course* the learning event forms a unity and there are particular interdependencies and co-activities among the different modes of learning. Moreover, when the modes of learning are discussed separately, this fact must be continually kept in mind. In general, it will become clear that they can only be distinguished from each other and that any one of them continually intersects, supplements, accompanies and predisposes the others (10 p 112).

2.4.2 Accompanying modes of learning

a) General

Sonnekus, Ferreira and Van Niekerk (11a pp 76-80; 11b pp 112-116; 11c p 81) have qualified sensing and attending as accompanying

modes of learning because they represent a particular course in the learning event and both serve as impetuses for actualizing the gnostic (cognitive) modes of learning.

b) Sensing

Although a person is continually an attentive, meaning-giving and active presence in the world, his attentiveness only becomes awakened when he becomes aware of something or someone. Sonnekus (12a p 63; 12b p 76) indicates that sensing is not a matter of pure awareness but is an *intentional-subjective act of a person as a totality* in contrast to the views of the psychology of consciousness that only makes mention of "sensations" resulting from sensory impressions originating from "stimuli" from the environment. Sensing is designated as the first concerned involvement with *content*, a becoming and being aware of matters on an intuitive, naïve, vague, unordered, superficial, pre-cognitive and pathic-affectively attuned (emotional) level (13 pp 114-117). Sensing not only serves as the origin and precondition for attending but also for all additional cognitive modes of learning.

Sensing initiates and accompanies further learning on a gnostic-cognitive level because effective attending, perceiving, thinking, remembering, etc. require a *stable* sensing.

That sensing is an emotional attunement expresses the fact that stability, security, calm, confidence and equanimity stabilize sensing while anxiety, tension, uncertainty and insecurity labilize attending. Although it is the foundation on which all knowing, structuring and ordering are built, because of the absence of wondering, attending, perceiving, thinking, reflecting and acquiring knowledge, it hardly can be designated as an exploratory, intellectually directed effort and lived experience (14 p 64). Thus, sensing is pre-cognitive in nature and can be designated as a genuine childlike way of associating with reality that at the same time is very subjectively colored. Each child's sensing is unique since it is a way in which he gives personal sense and meaning to everything with which he is involved.

Erwin Straus and Sonnekus (15 p 115) moreover emphasize that sensing is time-space bound. Childlike ways of living such as touching, smelling, tasting, hearing and seeing are concrete-sensory in nature and in their totality and as a unity impact sensing as a mode of learning and point to its time-space boundness.

As far as the *autistic child's* actualizing sensing as a mode of learning is concerned, it must be emphasized that, especially with school beginners, for a variety of reasons it progresses inadequately. Because of the absence of a manifested, genuine human being aware of himself and others as persons and of the meaningfulness of things in the surrounding reality (without which sensing is barely realizable), the autistic school beginner conducts a seemingly "unconscious" way of existing. The following question, as asked by Husserl and cited by Bosch (16 p 110), can be applicable to the autistic child and offers an apt description of such a child's way of existing: "Husserl has discussed the interesting question to what degree a solipsistically conceived subject, i.e. a perceiving and thinking subject without the least idea of another and thus also oblivious to itself without any awareness of itself, can arrive at the constitution of a world". Because the autistic child's being aware of reality as an attentive–being-in-the-world appears to be so attenuated, it is obvious that his sensing will be of a particularly weak quality.

In light of the fact that sensing is strongly permeated pathically-affectively (emotionally) and that the autistic child is characterized by a labile, even impulsive emotional life, it can be correctly asserted that such a child's sensing is very labilized. Consequently, the autistic child is handicapped in his everyday experiencing of reality, especially because his wondering, feeling of ignorance and his initiative to overcome resistances (as a matter of willing) are so extremely inadequate. Prick and Calon (17 pp 274-286) also emphasize in this context the fact that self-initiated, activities of intellectual effort by the autistic child are lacking. It is precisely this labile and impulsive affective life of the autistic child that obstructs his elevation from a pre-cognitive to a cognitive level of experiencing.

Where with a normal child, sensing *initiates learning* because it leads to wondering, curiosity and giving meaning to the content that he senses, this is not the case with the autistic child. The conspicuous otherness of the autistic child in this respect especially comes to the fore if the absence of *listening and observing* is taken into account (i.e., gnostic-cognitive modes of learning initiated by sensing and attending as accompanying modes of learning). The rare, inappropriate use of the sense of vision and hearing as well as the fascination with impressions from touching, smelling and tasting merely for the sake of primitive sensing that clearly has to do with bodily satisfaction are characteristic of the autistic child. For example, from early on he shows no visual or auditory directedness for the sake of decently exploring reality. According to Prick and Calon (18 p 212), with the autistic child there is no indication of an objectifying (i.e., stepping outside of himself) sensing and perceiving. The autistic child is so unobservant of and uninfluenced by meaningful visual and auditory stimuli such as, e.g., the appearance of a person in his vicinity and the human voice, so that he is seen as "blind" and "deaf" by the uninformed (19 pp 8-11). The autistic child's imprisonment in senso-pathic sensing also involves him being caught in using the senses of touch, smell and taste as well as vibrating sensations merely for the sake of bodily satisfaction or satisfying desires and he does not use sensing to explore to explore reality (content) in a meaningful way. Wing (20 p 177) views this excessive use of the so-called "near senses" as characteristic of an autistic child and she expresses herself as follows: "Perception is done much more by their tactile and kinesthetic senses, and even by their sense of smell or taste". This attachment to haptic contact, i.e., a desire to feel and touch an object becomes especially clear when Wing (21 p 42) describes the comings and goings of an autistic little girl as follows: "She would examine objects by holding them near her eyes – also by touching, tasting and smelling them and seemed to find enjoyment in the feel of smooth surfaces".

Certain autistic children even go so far as to smell a person on first acquaintance (22 p 68). An attachment to senso-pathic sensing, being thrown back on and imprisoned in his own body and a "desirous immersion in bodily stimulation" are seen by Prick and Calon (23 pp 254, 161) as characteristic of the autistic child and

report on this as follows: “Wij zijn de mening toegedaan, dat eerst dan met recht van autisme gesproken mag worden, wanneer enerzijds de beleveniswereld geconstitueerd wordt door het beleven van het eigen lichaam en het lustvol daarin opgaat, terwijl anderzijds blijkt, dat deze beleving slechts optreed bij een overdriven prikkeling van de tactile-proprioceptoren en de daarmee corresponderende structuren der nervale organisatie”. The autistic child’s imprisonment in sensory “stimulation” is sketched by these authors as follows: “Autistische kinderen blijven steken in de wereld van tasten, zich bewegen, voelen en ruiken, *en* ook daarin ontbreekt de aandacht voor het andere of de ander als zodanig en overheerst het ervaren van het lichaam zelf, het geen steerk met lust en onlust geladen is. Terwijl deze kinderen blijven hangen in de wereld van de tast, wordt dit tasten bij normale kinderen ondergeschikt gemaakt aan het zien en het horen. Normale kinderen leven dan ook in de wereld om hen heen, terwijl bij autistische kinderen de spontane toewending tot de wereld achterwege blijft”.

The conspicuous difference in the sensing found in the autistic child. done to satisfy bodily needs, is described as follows by Prick and Calon (24 p 210): “Op het laagste trede van het lichamelijke bestaan is de wereld de autist slechts gegeven onder het aspect van het tastbare, het trilbare, het beweegbare, het schommelbare, het stootbare, het stuitbare, het besnuffelbare, het aflikbare en het afzuigbare”. The autistic child’s attachment to stimulating the skin can also show itself in great enjoyment of being involved with sand and water. The autistic child’s interest in this merely for bodily stimulation appears clear in the following description (25 p 239): “Ann picked up a handful of sand, sniffed it and gave a gurgle of pleasure. For the rest of the holiday she spent her time running round and round in the sand scooping up great handfuls and throwing them in the air with squeals of joy”.

Sensing as an initiating way of attending and gnostic-cognitive learning will thus be very difficult for the autistic child to actualize.

c) Attending

As cited by Sonnekus, by the concept *attending,* Van Niekerk means a readiness, an active, exploring directedness to and an actively

remaining involved with and lingering with something (learning content) or someone (26 p 44). A lived experience of stable sensing is a precondition for attending while attending is a precondition for all cognitive learning on whatever level and of whatever nature (27 p 43).

Thus, attending is correctly qualified as an *accompanying mode of learning* for all gnostic-cognitive modes of learning such as perceiving, imagining, fantasizing, thinking and remembering. The optimal actualization of attending by the child is necessary for adequate teaching and learning to occur in a teaching-learning situation.

A lived experience of stable sensing serves further as an impetus for the child to be readily willing to linger with the learning content on a higher level, i.e., on a conceptual, cognitive level, to explore this content in a self-actualizing and meaning-seeking way, to know, analyze and to order and synthesize it (28 p 44). Thus, attending is an act of *intentionality* and is grounded in the child's being propelled by a lived experience of wonder and by a search for the sense and meaning of what is attended to.

In this taking up of an exploratory position the child continually lived experiences resistances and is supported by his willing, which gives direction and purpose and especially leads to a decision, and is accompanied by a lived experienced stable sensing (that can be qualified as: *I-can-know*), the child makes a willful decision as a decision lived as meaningful and he lingers with the learning content or merely gives his attention to it (29 p 44). It is obvious that a labile sensing allows attending to fluctuate, become attenuated and abate and thus prevent the possibility of effective learning.

In a purposeful, unwavering and resolute way, attending is focused on the learning content and can be designated as an *accentuated intention to learn* since it is backed up by a decision to remain involved with the learning content. In addition, attending is viewed as a selective activity because there is always something specific in the point of focus of his attending, and the surrounding, less important data remain provisionally and vaguely in the background

(30 p 119). Thus, essentially attending is *selective* because no more than one matter can be attended to at the same time. Through this fixation of attending on the meaningful, it is possible for the child to be able to really learn to know the learning contents since moments such as identifying, delimiting, analyzing, comparing, ordering and integrating always come into play (31 p 119). The eventual learning result of sustained attending is understanding and insight, i.e., knowledge.

For a variety of reasons, attending, as a mode of learning, is under-actualized by an autistic child: With his unfailing, unusual aloofness towards others, his defective affection for, directedness to and encounter with fellow persons, he is hindered in realizing a pedagogic encounter in the teaching situation. Thus, the autistic child fails to attend to the learning content that is unlocked for him by the teacher. Excessive turning into one's self (introversion) and a continual withdrawal from reality, characteristics of young autistic children, imply that such a child's way of existing as a person stagnates and becomes rigid and the meaningfulness of his life is not realized: "De wereld lokt het kind dan niet uit tot nieuwe en andere ontmoetingen, met mensen en dingen, persoonlijk en intiem", according to Van Spanje (32 p 32). Thus, it is obvious that attending, as an act of intentionality, is hardly realizable by an autistic child.

Different than a normal child, sometimes the autistic child is incessantly involved in "discovering" and examining his fingers, even long after his days of infancy have ended. Because of this, paying attention is also difficult. In addition, his labile emotional life brings about a weak venturing attitude and impedes attending as a purposeful turning to and remaining with the learning contents.

Paying attention also requires a sustained attentive directedness to the meaningful without unnecessary fluctuations in attending and this also is closely related to a fixation of attending on the meaningful without it being unnecessarily diverted and becoming engrossed in nonessentials, trivia or by things that are not relevant. In this respect, according to Frye (33 pp 430-431), the autistic child is guilty of unsuitably, faultily directed attending because he is

often engrossed merely in the outwardly perceivable, the less important or matters that are not at all relevant. Such unsuitable directions of attending do not offer a solid foundation for the cognitive modes of learning. This not only brings about defective imagining but, at the same time, promotes defective concept formation, concretely bound thinking and an inadequate development of thought.

Harmony between the concentration of attending and its shifting to other meaningful learning contents also determines its quality. Excessive, compulsive being anchored by only a few slices of the surrounding reality (perseverations), on the one hand, and hyper-distractible attending, on the other hand, both of which are characteristic of many autistic children, adversely influences full-fledged attending (34 p 69). Also these children often lack the necessary ability to concentrate on the essentials and to ignore stimuli not relevant to the specific thinking or learning assignment. Besides this, as a consequence of perseverations, rigidness and inflexibility in directing his attending, the autistic child is often hindered in proceeding to flexibly attending (35 pp 177-178).

In addition to ineffectual attending, phenomena arise such as hyperactivity, weak concentration, quick fluctuations in attending and a short attention span because of a heightened distractibility in attending, that is especially characteristic of brain damaged children, and also to a greater or lesser degree with some autistic children.

The inadequate self-actualization of attending by the autistic child will not only impede the possibility of actualizing additional knowing or cognitive modes of learning but this also lessens the regurgitation of meaningful lived experienced, congealed possessed experiences. Thus, the autistic child's experiential world is decidedly impoverished by his problems in attending adequately.

2.4.3 GNOSTIC-COGNITIVE MODES OF LEARNING

a) Observing/beholding

Van der Merwe (36 p 171) has illuminated the essences of observing as a way of actualizing intentionality, from a psychopedagogic, lived experience perspective. He describes it as follows: "Observing is taking a personal position, a total sensorial act of lived experiencing by a subject who is a totality-in-function in communication with reality, and who momentarily lived experiences in the lifeworld by actualizing intentionality (as a constitutive foundation) that includes sensing (the primary way of lived experiencing) as well as the preponderantly gnostic modes of lived experiencing of perceiving, imagining, fantasizing, thinking, actualizing intelligence and remembering". Thus, observing is a *total sensorial act of lived experiencing* that embraces the mentioned modes of learning, or more specifically their sensory components (37 p 87).

Observing is also a totality act of intentionality (i.e., a person is involved via emotional, willing and cognitive efforts) and therefore it can be viewed as a means by which his openness and meaning-giving directedness to the world are shown (38 p 140). Via his senses the child comes forward to meet the world in order to experience it and establish a personal and unique experiential world for himself.

However, childlike observing is borne and propelled by the adequate actualization of the accompanying modes of learning (sensing and attending) and therefore their adequate actualization is a prerequisite for its actualization as a childlike mode of learning.

To make an effective teaching and learning effect possible, the child must be able to see or observe the meaningful contents, i.e., what at a given moment is of relevance in his surrounding world. If it is assumed that a child must be able to place his senses in the service of a humanly appropriate exploration of and giving meaning to reality, the conduct of the autistic child in this respect is clearly conspicuous. The absence of *observing*, i.e., an *attentive looking* for the sake of exploring reality, especially characterizes a difference between autistic and normal children.

This activity of looking (observing) points to a more active, directed connection with the learning content than does a more passive seeing or optical perceiving because the former is clearly meaning

seeking, exploring, meaning-receiving and meaning-giving in nature. The activity of looking is a consequence of giving attention and is a requirement for exploring and structuring the surrounding reality. When a person inspects or observes something or someone (content), it is as if he feels the observed with his look, in this way he shows his openness, his conscious, attentive directedness, and it becomes the problematic for him, the focal point of his concentration and he eventually gives it meaning (39 p 66). By actively looking there is thus the delimiting of a landscape and the structuring or designing of an optimal space on which attention is focused. However, it is not only important to actualize observing as an exploring directedness but *also to appropriately place the meaningful at the center of this optimal space as soon as attending is fixed on it.*

In contrast to the "normal" child, who shows an alertness in his eyes, the eyes of the autistic child appear as lifeless marbles and their vacant look is conspicuous. The appearance of an autistic child's eyes, because of an absence of purposive acts of looking, are typically described with "…. their strange staring look", "empty gaze", "vacuous, unfocussed staring into space", etc. (40a p 7; 40b p 82). On the basis of their "unconscious" existence, their inability to distance themselves from themselves, and because of the lack of wondering, curiosity and an exploratory directedness, they are not in a position to concentrate on and attend to their more distant, visual sensing. Because they are unable to direct their attention to the more distant filed of vision, as far as lived experiencing visual impressions is concerned, they are, as it were, riveted to what is at hand. In this connection, Wing (41 p 11) asserts the following: "Peripheral vision tends to be used in preference to central". Prick and Calon (42 p 155) describe this phenomenon as follows: "Hun zien is slechts een optisch waarnemen, dat bij de mens steeds een objectiverend moment omvat, benevens een uit-zich-zelf-treden en een in-contact-treden met de verte impliceert, is geen sprake. Hun optisch ervaren is derhalve geen echt visueel waarnemen en geen kijkennaar. Bij autistische kinderen blijft de spontane toewending tot de visuele wereld achterweg". Thus, the autistic child does not succeed in delimiting his visual landscape and proceed to optimally structure it. Because with such a child there is no noticeable truly

exploratory directedness, interest in and purposeful exploration of a meaningful landscape, there is no genuine observing.

Autistic children usually have no facial directedness and also do not succeed in taking a face-to-face position with respect to another. Rather, it seems as if they purposefully try to avoid eye contact, remain next to a person, or even look "through" a person and stare into space (43a p 137; 43b p 28). Wing (44 p 7) views this lack of facial directedness as a general characteristic of young autistic children and expresses herself about this as follows: "Almost all these children go through a prolonged stage during which they do not look anyone in the eye".

In addition to observing the *act of listening* is a cognitive mode of learning that results from attending as an accompanying mode of learning. Because a person does not hear or listen in a merely process-like or mechanical way with his auditory organ and brain, it is necessary to take into account a person's attunement especially to the heard spoken voice of another (voice-directedness) and his interpretive potentialities to be able to give meaning to its thought-contents. Hence, listening, just as observing, can be viewed as *a way of actualizing intentionality by a person as a totality in communication with reality.*

To be able to listen to the spoken voice of another requires openness, an exploratory disposition and an auditory directedness (voice-directedness) that is meaning seeking, meaning experiencing and meaning giving (45 p 78). The voice of a fellow person obviously does not invite any auditory or visual directedness as well as being an emotional disturbance for the autistic child. Thus he does not manifest himself as one who is addressed and listens, he does not listen if he is called by name (46 p 160) and because he is perhaps unaware of his surrounding world, he takes note of what is happening around him in an entirely particular, incomprehensible way (47 p 11). In this connection, Prick and Calon (48 p 212) report as follows: "Van een objectiverende, d.w.z., een buiten zichzelf tredende gewaarwording en waarneming is bij hem geen sprake. Zij luistereeren niet naar iets, doch zij bemerken slechts akoestiche impulsen en taxeren deze op hun nuttigheids- of schadelijkheidsaspect".

Autistic children listen only to what is meaningful to them, e.g., to music that causes vibratory bodily "sensations", and ignore stimuli that are meaningless to them. Thus, they do not use their sense of hearing, via attending, to carry on a dialogue with learning contents that are unlocked, or to encounter others but to protect themselves from anxiety provoking lived experiences (49 p 431). Because the autistic child does not hear and listen in genuinely human ways, he is often viewed as deaf (50 p 152). Possibly on the basis of a possible disharmony and absence of an integration of the various functional levels within the central nervous system, the autistic child is unable to be able to give sense and meaning to auditory impressions (51a p 246; 51b p 29). Because of his unusual, ineffective employment of his distance senses (seeing and hearing), i.e., that he does not attentively look and listen adequately, initially the autistic child is not in a position to realize the cognitive modes of learning and also is not able to encounter fellow persons in a full-fledged way. Wing (52 p 21) states the matter as follows: "Some go through a phase in which the speech of others seems to produce real distress, as revealed by a tendency to cover the ears and eyes or even by screams". Such behaviors possibly can be attributed to deficient potentialities for attributing meaning.

The inadequate self-actualization of observing (looking and listening) by the autistic child not only obstruct the figuring forth of adequate teaching but also the actualization of perceiving, thinking and remembering as cognitive modes of learning.

b) Perceiving

Erwin Straus, as quoted by Sonnekus and co-workers (53 p 84), indicates that perceiving means that the naïve, pathic character of sensing has been broken through or surpassed. Thus, perceiving implies the giving of meaning to sensing in an active, intentional directed, cognitively effortful and conceptual way. Consequently, it is a gnostic way of lived experiencing on a distanced, cognitive level that involves the real, actual, factual, objectively perceivable and actualized by means of a universal medium (54 p 84).

Through perceiving and lived experiencing meaning the child's horizon of knowledge and familiarity increase. As a gnostic-cognitive mode of learning it is directed to the problematic, especially to analyzing, comparing, reflecting, ordering and synthesizing it in and by linguistic description that leads to knowledge of the object. Thus, according to Sonnekus (55 p 66), Straus views the "first seeing" of a person as his giving personal meaning, thus sensing, and the "second seeing" as perceiving by means of identifying [the object] via language as a universal medium. The terrain of the generally knowable, the factual is thus entered and the vagueness, lack of clarity and lack of structure that exist on the level of sensing become illuminated, understandable and ordered during perceiving (56 p 120). Also, the quality of childlike perceiving is related directly to the degree that he succeeds in adequately actualizing the accompanying modes of learning (sensing and attending).

In the following it is necessary to attend to some important essences of perceiving, illuminate them and indicate what adequate perceiving demands of the child. First, adequate perceiving requires *stability in affective lived experiencing* that will promote a distancing [from sensing] to perceiving in contrast to lability in affective lived experiencing that can lead to a pathic flooding of perceiving or indeed to disturbing it (57 p 84).

Perceiving is also propelled by *a positive willing* that makes possible the self-initiation of perceiving as an intentional act. That is, a person who perceives is willingly directed to the essential nature of what he experiences in perceiving. He wants to be aware of, know, grasp and understand (58 p 120).

A precondition for "objective" perceiving is the child's ability to distance himself from his subjective-pathic lived experiencing as well as be able to loosen himself from being self-oriented and his immediate needs and to direct himself in more formal ways to the remote, to the problematic (59 p 84).

At the same time, adequate perceiving requires the ability to delimit or define the object of perceiving and place it in the foreground while the totality of data that surround the particular perceptual

field are vaguely in the background. Thus, perceiving must be *global-identifying* (60 p 121). In this context, identifying refers to *recognizing the essentials* of the perceived.

The question that now arises is how the once vague and unstructured nature of the learning object that the child experiences on the level of sensing is elevated (to perceiving) and what demands does this place on the child. By attentively listening, looking and feeling, i.e., by an analyzing activity, the child is able to perceive finer details and strengthen his grip on the larger whole. An analysis of the learning content makes additional understanding and insight possible and promotes gnostic-cognitive learning (61 p 122).

Moreover, perceiving also requires *synthesizing,* i.e., forming a synthesized whole from the parts or sub-parts, in which seeing relationships plays an important role. Synthesizing places the crown on what the child has globally identified and analyzed by means of perceiving (62 p 123).

Perceiving also assumes that *ordering* must be actualized, indeed in and through descriptive speech, questioning, naming and formulating the perceived. As a gnostic-cognitive mode of learning, perceiving is inseparably connected with language as a generally valid medium for naming, describing and formulating. In addition, perceiving is not realized in a watertight compartment but as a mode of learning it is intertwined with moments of thinking, remembering, imagining and fantasizing—all gnostic-cognitive modes of learning. The child's possessed experiences, among other things are the fruit of remembering, and facilitates further perceiving while deficient possessed experiences thwart its effectiveness (64 p 125).

The *autistic child* differentiates himself from the "normal" child in that he is not one who yearns for or embodies a dialogic involvement with others and the surrounding reality. The human search for a grip on reality, whether by an involvement of acting, perceiving, thinking, searching, questioning, playing or working with the surrounding reality, emphasizes the fact that a human being is one who searches for, finds, lived experiences and gives or

creates meaning in order to find a foothold in the world for himself. The autistic child's defective speech, acquisition and mastery of language, as well as his lack of directedness to fellow humans, spoken communication, the child question, spontaneous communication of experiences to others, unquestionably imply the inadequate actualization of perceiving and all other gnostic-cognitive modes of learning. Deficient mastery of language also results in perceiving being bound to the concrete and the child does not succeed in realizing perceiving on a higher (abstract) level. Language acquisition, as a precondition for perceiving, is possible only when his "unconscious", purely self-directed way of existing is broken through and he shows signs of a directedness to fellow persons, the search for, the receiving and giving of meaning.

Adequate perceiving is closely related to the fixation of attending on the essentials without being distracted by and engrossed with non-essentials and trivialities. Frye (65 pp 430-431) asserts that the autistic child is guilty of the unsuitable, faulty direction of attending because his attending often becomes engrossed merely with outward appearances, the less important or matters that are entirely irrelevant. This hinders this child in adequately realizing all cognitive modes of learning including perceiving.

Frye (66 p 431) also mentions the poorly integrated perceiving of certain autistic children and ascribes this to their difficulty in making generalizations, i.e., the connection between the newly perceived and possessed knowledge are difficult to see and understand; also, he is unable to see connections and find relationships and to perceive with insight. Rimland (67 p 79) sketches the matter as follows: "He cannot integrate his sensations into a comprehensible whole – his perception of the world is therefore vague and obscure".

The autistic child's inability to distance himself from his subjective-pathic lived experiencing and loosen himself from his bodily needs are described thusly by Prick and Calon (68 p 212): "Van een objectiverende, d.w.z. buiten zichzelf tredende waarneming is bij hem geen sprake".

From the above it thus is clear that the autistic child is seriously retarded in his perceiving as a gnostic-cognitive mode of learning.

c) Imagining and fantasizing

To be able to understand imaging as a gnostic mode of learning it is necessary to indicate the difference and connection between it and perceiving. Where perceiving is directed to the real, concrete, palpable, observable world, imagining is an entirely different relationship to reality, i.e., the "perceived" [imagined] object is not really present but is "represented" by an act of imagining. Imagining means a directedness to an unreal [irreal] world, an unrealistic world as a "reality in distance" (Sartre, as quoted by Sonnekus (69 p 67). The vividness of perceiving with its richer differentiation, sharper outlines and greater detail are not realized in the act of imagining. Thus, imagining refers to a breaking through reality because it represents a more distanced relationship to and giving meaning to reality (70 p 130). However, no matter how "unrealistic" imagining might be, it is necessarily connected with previous perceptions because *something* is imagined (Minkowski). This means that it finds its origin (fully or partly) in reality and is inseparably related to the child's possessed experiences (71 p 130). A child's possessed experiences largely provide *content* for what he imagines for himself. However, this does not imply that imagining merely has to be "reproductive" because the data of perceiving are surpassed because something new or additional is added. Thus, imagining includes a distancing from and surpassing of reality as a space for a creative or imaginative involvement with it (72 p 131).

But the possibility exists that such imagining can be true to or foreign to reality, the latter occurs when links are found to the child's fantasy life. In addition, it is emphasized that although imagining is not thinking it can make the latter possible and even initiate it (73 p 131).

In comparison with imagining, *fantasizing* is a way of attributing meaning that is even more distanced from reality. This implies a distancing to the unknown, the future, to that which is not yet or may never become reality (74 p 67). Fantasizing is thus a "free play

of images", an activity that offers the opportunity to "escape" reality and to "lose" oneself in a world where pathic-affective feelings, wishes or desires are rampant (75 p 131). Consequently, the fantasy world has a genuine personal flavor with a strong pathic-affective color.

Fantasizing also offers the possibility of thinking creatively, penetrate and work productively on a predominantly gnostic-cognitive level (76 p 131). In concert with imagining it is asserted that these two modes of learning are directed primarily to knowing, designing, creating, inventing, etc.

Imagining as well as fantasizing offer the possibility of surpassing reality because they often give rise to new thoughts, ideas, designs, etc., and each not only has particular relevance for learning but they also are culture-creating in nature (77 p 132). By means of imagining and fantasizing the child surpasses the immediately perceivable world and finds himself in the world of the abstract with its primary gnostic-cognitive flavor.

Imagining and fantasizing are supported to an important degree by the quality of the child's previous perceptions and possessed experiences. The effective integration of the perceived with existing possessed experiences is decisively importance for adequate imagining and fantasizing. The quality of the child's possessed experiences, as the result of his experiencing, willing, lived experiencing and behaving is going to be decisive for whether or not imagining will be true to reality. Imagining as well as fantasizing can only be of high quality on the basis of an active support and realization of adequate thinking and remembering as cognitive modes of learning.

Concerning the *actualization of imagining and fantasizing* (as well as all other modes of learning) *by the autistic child,* it must be emphasized that the defective giving of meaning to reality because of brain abnormalities is perhaps the basis for this inadequateness. Continual withdrawal from reality and an excessive self-orientation are only two ways in which the defective attribution of meaning (interpretation abilities) shows itself and as such exercises an influence on the child's fantasy life, as is seen in the following

comment by Bettelheim (78 p 81). "The more the person withdraws from reality into autism, the emptier, the more repetitious and stereotyped becomes his fantasy life. Autistic children are not usually interested in what goes on at any distance from them". Also, Wing (79 p 220) holds the same view in this connection and asserts: "Autistic children have little imagination and can rarely be interested in fictional events".

Imagining and fantasizing imply a breaking through reality and a being directed to the unreal. In light of this, the autistic child's sustained *maintenance of a specific order* in his everyday dealings, his attunement to *preserve the same conditions* (e.g., the arrangement of furniture in a room) as well as his *vehement protest against changing a particular order* or refusal to accept new things are mentioned as restraining factors in the actualization of imagining and fantasizing (80a p 1485; 80b pp 453-457). With respect to this excessive attunement to a specific order, Vedder (81 p 153) draws the following conclusion: "De zin voor orde is dus bij hen een aanwijzing, dat hun wereld zeer verarmd, hun omschakelingsvermogen nihil geworden is en dat zij van de wereld geen afstand kunnen nemen".

The meaningless handling of objects day to day in the same way, a peculiar phenomenon with a number of autistic children, can also be viewed as a hindrance to realizing imagining and fantasizing as modes of learning. The purposelessness and unimaginativeness of such activities are clearly evident in Wing's (82 pp 9-10) pronouncement: "Autistic children tend to use objects in ways which are quite unrelated to their proper function, for years after the infant stage. Such activities seem empty, meaningless, obsessionally (sic) repetitious, and quite unlike the creative fantasies of the normal child. Some children are only interested in spinning the wheels of toys, others in shaking them to make a noise, and so on. Whatever the interest, any available object is pressed into service regardless of its intended use and cannot be qualified as part of imaginative play as normal children would do". The autistic child is so imprisoned in sensopathic "play" that there is no mention of illusive play. For example, building blocks are gripped each time in precisely the same way to form a tower and such a child will not take the initiative to try to build a house with them. Similar

unimaginative handling of toys by an autistic four year old girl is described by Wing (83 p 64) thusly: “She lines up her toys in a line across the room and out of the door into the garden”.

The autistic child’s inadequate imagining also comes forth in his involvement with others. For example, an autistic child can give no evidence that he recognizes his parents, shows no sadness when they depart and leave him alone, shows no joy when he sees them again after a short time, doesn’t have the vaguest idea of greetings, does not smile at or for his mother in humanly appropriate ways, etc. With respect to the “lifeless” facial expressions of the autistic child, Vedder (84 p 143) expresses himself as follows: “Een contact-op-afstand kunnen zij niet maken en daardoor ontbrekken bij hen de typisch menslijke vormen van verstandhouding, zoals door middle van de ogen, de blik en de mimiek tot stand pleegt te komen”.

The emotional dullness of the autistic child can also be ascribed to his inability to actualize imagining as a being directed and as a mode of learning. Emotionally, the autistic child often is hardly reachable or impressionable, is unmovable, addressable and difficult to influence. Also, he often shows extremely inadequate sympathy, compassion, consideration or empathy with respect to the discomfort, sorrow or suffering of another (85 p 90). Wing (86 p 88) describes these inabilities of the autistic child as follows: “He reveals a lack of understanding of how other people feel and how they would react to his behaviour”. Thus, the autistic child is not in a position to intellectually imagine the feelings of another.

Bettleheim (87 p 451) ascribes the autistic child’s belief in the “permanence” of the existence of persons and objects to a shortcoming in his interpretive- (in this case also imaginative-) potentiality and reports on this as follows: “The autistic child is unable to establish in the external world what he cannot establish in his mind. To the autistic child objects and people exist for him only when he sees them or they are readily available; they cease to exist for him when they move beyond his familiar orbit. As long as the child is not convinced of his own existence as a constant, he cannot believe in permanence of any kind. Even where persons are of tremendous emotional significance to the child, their constancy as

persons is not established until that of the child himself is fully secured. It is this permanence of the image in the mind that lends credence to the permanence of an object or person when it goes out of reach and out of sight. Unfortunately, if no one has permanence then neither has he". The fact that the autistic child does not have a belief in the so-called permanence of objects or persons again emphasizes his inadequate potentialities for imagining and an inability to fully assimilate his lived experiences with his understanding (88 p 451).

The autistic child's extremely deficient body-awareness, -idea, --knowledge or –image can also be attributed to his inadequate realization of imagining. However, a deficient body-scheme can also be ascribed to the absence of spoken language communication and an excessive self-orientation. Piaget, as cited by Bettelheim (89 p 444), notes the following: "It is precisely when the subject is most self-centered that he knows himself the least, and it is to the extent that he discovers himself that he places himself in the universe and constructs it by virtue of that fact". For example, body parts might not be seen as an inseparable part of an integrated unity. Thus, an autistic child might try to put her foot in a doll's pram and push it around and in doing so show her deficient insight into and imagining of her own bodiliness. This extremely deficient body-image is also shown in the autistic child's robot-like drawings of persons. Hence, the human face is drawn as angular or round and the ears are represented as little wheels. Even when an autistic child must carry out the assignment to draw himself or his family members there is a persistent construction of "lifeless, machine-like objects".

Although not peculiar to all autistic children, illusions, false notions (hallucinations) and ungrounded fears (phobias) arise in some of them. Incomprehensible and inexplicable, sometimes intense fear for trivial, harmless objects, little animals and certain routine activities arise with some autistic children. Wing (90 p 64) has found that two out of every three autistic children show one or another morbid, ungrounded fear or anxiety. Thus, e.g., one finds fear of a washroom, of entering a bathroom and especially climbing into the bathtub, for an escalator and an elevator, of putting shoes on, of getting a haircut, of climbing on a seesaw or a rocking-horse,

of putting roller skates on, of the ring of a telephone, sounds of music, for dogs and cats, for the unexpected, loud roar of an engine or going into a church (91 pp 9-33).

In addition, an autistic child might feel threatened by the bright light from a street lamp or a large bush in front of a window that waves back and forth in the wind, or even a large truck that is called a "monster" (92 p 241). These ungrounded fears once again refer to the deficient imagining and understanding of reality.

The entire matter of the discovery, acquisition and mastery of language, that also is a problematic matter for the autistic child, offers much evidence that in his acts of imagining and fantasizing the autistic child is thwarted by an inadequate mastery of language. Because a deficient master of language also hampers the quality of the child's thinking, remembering and actualization of intelligence, the entire matter of language is discussed later.

In the previous sections it became clear that for a variety of reasons the autistic child does not succeed in adequately actualizing imagining and fantasizing as modes of learning.

d) Thinking

Van Niekerk (93 p 87) explains that in thinking an elevation in level occurs from an attentive-being-in-the-world to an attending-being–in-the-world because in his thinking going out [to the world] a particular slice of reality is lived experienced as a *problem.* To be able to think a child must first lived experience a problem in his involvement in reality. The questioning attitude of a child reflects the fact that earlier in his life he has had to deal with the problematic in reality and for this reason Straus (94 p 125) calls this questioning attitude the beginning of thinking since it a search for answers and solutions.

Sonnekus (95 p 263) points to thinking as an active, intentional activity by which methods of solution and means of ordering are activated to cope with the problem situation that is the task for thinking. By activities such as planning, analyzing, comparing, ordering, synthesizing and abstracting the child tries to arrive at a

better understanding of and solution to a particular problem. Although thinking as a gnostic-cognitive mode of learning cannot be separated from perceiving it is largely perception-fulfilling since the thinking child directs himself from his perceiving to the world of thought—a world in which the objective, the conceptual, insight and understanding are in the foreground (96 p 126). Straus, as cited by Sonnekus (97 p 85), emphasizes in this context the break-through character of thinking that involves a distancing from an initial sensing (i.e., affective lived experiencing) via perceiving and especially abstracting to enter the level of the conceptual.

To better understand the break-through character of thinking as a cognitive mode of learning it is necessary to explicate the *particular affinity between thinking and language.* This affinity is discussed by Van der Stoep and Nel (98 p 61) under the heading: "The parallelism language-thinking as a genetic [i.e., developmental] relationship". Meijers (99 p 24) states in this regard: "De taal is als een tweede rad, dat evenwijdig met het eerste rad het denken op dezelfde as loopt". Van der Stoep (100 p 72) asserts that thinking is always slightly in advance of language and therefore the latter follows thinking. In this regard, Lewis (101 p 44) says: "Thinking occurs prior to language; but when language is present it certainly influences thinking; and there are forms of thinking which are difficult if not impossible in the absence of language". Kwant (102 p 184) expresses himself as follows in this connection: "Het denken existeert in het spreken. Toch vallen denken en spreken niet samen, omdat het denken veel existentievormen bezit. Aan het denken-in-worden moet echter to een privilege worden toegekend, omdat het zich tot alle vormen van denken kan uitstrekken". Van der Stoep (103 p 72), following Revesz, states the relationship between language and thinking as follows: "In the relationship between language and thought, their rank order appears to be evident: thinking is grounding and language is a means to it, but in addition to their obvious coherence there also is mention of a reciprocal interdependence that mainly is an unbreakable duality that enters into a multitude of relationships". While thinking in its progression and additional mastery is genetically prior to language, at the same time language forms the stepping-stones or the stratum on which thinking is supported. However, this relationship is mutual and as language is a support for thinking, thinking is also the impetus for

additional language mastery (104 p 254). According to Kwant (105 p 156), the word (language) "..... het werktuig, het vehikel van de levende, denkende geest", and is "..... de gedachte niet klaar met zichzelf, alvorens zij verwood wordt" (106 p 179). Thinking only comes to completion and to true thinking when it is expressed in words. According to Nel and Van der Stoep (107 p 24) thinking will undergo an inhibition, retardation or even stagnation if the formation of thought is not continually crystallized into language and therefore the acquisition of language serves as the stratum for the continued development of thinking. Levine (108 p 21) expressed herself as follows regarding this: "From name to purpose to function to underlying reason, the child advances to steadily higher levels of abstract thinking". As soon as the thinking is crystallized into linguistic form, it offers thinking a foothold for additional ordering, categorizing and abstracting by which the language rises to a higher level (109 p 108). "If the verbal symbolic function were to be increased, the abstract level would be raised concomitantly", says Myklebust
(110 p 85).

Van der Stoep (111 p 23) asserts: "The highest function of the linguistic symbol is that it brings the unobservable and abstract to expression". By means of language a child is in a position to distance himself from the observable-concrete and, via thinking, to enter the world of the abstract, of thoughts thanks to the symbolic character of language. Language offers a person a means of traversing to the past, present, future, the abstract, the invisible and distant and is universally present and available because it is not bound to experiencing or the concrete (112 p 114). This means the child can loosen himself from the concrete and that the concrete remains in existence only in terms of symbols or thoughts.

To abstract in reality means to think on a conceptual level. By means of language a child can distance himself from the immediately perceivable while this distance is again partly eliminated by the meaningful concept. The concept becomes, as it were, a substitute for the concrete object while the latter, in its turn, provides the origin of the concept imbued with meaning (113 p 127).

Because language is a person's means of discovering and ordering the surrounding reality, this means that thinking requires ordering. From the surrounding world the child delimits his own world of meaning of the known and familiar by continually implementing language. Thought achievements such as analyzing, schematizing, synthesizing, comparing and generalizing are possible on the basis of the possibilities for ordering that lie in language itself. Without such ordering the child stagnates on the level of the concrete and the symbolic world remains inaccessible to him (114 p 128).

Thinking, as a search for solutions to problems, implies that there are particular resistances and stumbling blocks that must be overcome. To succeed in this requires a pathic-affective readiness to participate, a strong willingness and persistence to not shirk from the problem but to solve it by means of cognitive effort. In addition, it must be emphasized that all of a child's learning potentialities (the whole of his psychic life) are actively used during his act of thinking. In his thinking search for a solution, the child calls on his possessed experiences, i.e., his ready knowledge, means and skills at his disposal as well as on his immediate perceiving, imagining and fantasizing, all of which place him in a position to clear up the problem.

Thus, thinking, as a gnostic-cognitive mode of learning, is not only directed to abstracting, ordering and solving problems, but on the basis of their interdependencies it is supported and augmented by the other modes of learning (115 p 129).

Because thinking, as a gnostic-cognitive mode of learning, is made possible by adequately sensing, attending, observing, perceiving, imagining and fantasizing, it is not at all surprising that the autistic child also under-actualizes his psychic life potentialities with respect to thinking. Energetic behaviors, among which are intellectual activities such as *thinking*, only appear and develop in the autistic child as soon as openness arises with him, i.e., when his almost closed, depersonalized and bodily directed way of existing is terminated, and his active directedness to reality and his regard for fellow persons are awakened through intensive educating. In addition, one must be aware that the devotion to a rigid, fixed way of existing not only results in the autistic child's world remaining

unordered, but also that the firming up of his knowing, remembering, fantasizing and thinking cannot develop (116 p 429).

One of the greatest stumbling blocks in the development of an autistic child's thinking is his defective acquisition and mastery of language because his encounter with fellow persons is lacking. The communicative character of language especially comes forth in Kwant's (117 p 63) pronouncement about spoken language: "Zij is innerlijk en wezenlijk een ontmoetingswijs tussen mensen". Because child questions and spontaneous conversations about experiences are missing with an autistic child, this already implies a defective development in his thinking (118 p 164). Because an exchange of formulated thoughts is lacking the autistic child does not himself take the initiative concerning the flourishing of his thinking, as can be concluded from the following pronouncement of Bettelheim: "The mere fact, then, of telling one's thought to others, or of keeping silence and telling it only to oneself must be of enormous importance to the fundamental structures and functioning of thought in general, and of child logic in particular".

The nature and quality of a child's act of thinking clearly emerges in the dexterity, or not, of his mastery of language as seen in his implementing it. The autistic child's language and thinking are formal, impoverished, rigid, inflexible, practical, bound to the concrete-visible and does not reach the abstract level (119 p 163; 120 p 454).

The autistic child finds it extremely difficult to think on a conceptual level as is evident from the following assertion of Rimland (121 p 123): "The autistic child lacks the ability to relate new stimuli to remembered experience. He is thus virtually divested of the means for deriving meaning from his experience. He cannot understand relationships, nor think in terms of concepts, symbols, analogies or abstractions; and he cannot integrate his sensations into a comprehensive whole – his perception of the world is vague and obscure". This deficiency in insightful thinking clearly emerges in the following observation of an autistic child: "Gwen, when she wanted to draw, would disregard which end of the pencil to draw with, even after she saw clearly that her pencil when used with the wrong end made no marks. At the same time she was well able to

perceive that when someone at the dinner table had bread he would soon want butter" (122 p 457). Also, Frye (123 p 431) mentions that the autistic child has difficulty in arriving at ordering in his thinking because relating things, comparing and classifying do not appear: "Was sie neu wahrnehmen, bringen sie nicht oder zuwenig in Zusammenhang mit dem, was sie Schon fruher wahrgenommen odeer gelernt haben. Von sich aus legen sie keine oder nur wenige Verbindungen, und siedurchschauen nur schwer Zusammehange. Klassifizierung auf Grund von Erlebnistotalitaten fallt innen schwer".

Adequate thinking requires a pathic-affective readiness to overcome particular resistances and stumbling blocks. The autistic child contributes nothing to the unfolding and flourishing of his emotional life; indeed he communicates in affective distress as evidenced by his desperate clinging to a trusted little world and his inability to take a more formal, distanced, exploratory, cognitively effortful position (gnostic-cognitive directedness such as thinking) toward reality.

Thus the contribution of his thinking to effective learning is weak and leads to the under-actualization of learning and the potentialities of his psychic life and this leads to an impoverished experiential world.

e) Remembering

Viewed from a child-anthropological perspective, the mechanistic way of explaining memory by the (German) psychology of consciousness that amounts to imprinting, storing and reproducing (retrieving) impressions that were "registered" in the past, is inadequate. Straus (124 p 87) rejects the view that each impression is "registered" in consciousness and that generalizations result from this detailed content. He emphasizes that a person is only able to remember that in which he can distance himself from the pathic lived experiences and can reflect and think about them on a gnostic level. He points out that from the multiplicity of impressions in a person's association with reality, he tends to only remember the remarkable, the noteworthy, the new as meaningful (125 p 87). The importance of language in this respect cannot be over emphasized

because exploring reality without the possession of language, what has appeared in the landscape cannot be verbalized. Hence, no permanence can be acquired because without the possession of language the ordered determination of experiences is not possible. Lewis (126 p 35) writes about this as follows: "What has been imperfectly experienced is imperfectly recalled".

Straus (127 p 134) describes remembering as a person's way of living and involves himself with the question: how does remembering appear as a *childlike way of being?* He then points to the following fundamental ways of being that are at the basis of remembering: First, in his remembering a person is *aware* of the *past* as *past.* Thus, a person *remembers* the past (e.g., memorized learning material) in the *present.* Things, events or persons that are remembered are not present but indeed they are *re-presented* and are "present in absentia" (128 p 86).

Second, remembering is a description of events in the *past tense*. It is a temporal relationship in which events in the past are described in relation to the present and future. Thus, past and future meet each other in the present during the act of remembering (129 p 135).

Third, Straus refers to remembering as an activity of someone who lived experiences the *present* in contrast to his past and future (130 p 135). Basically, remembering means self-reflecting—a reflecting, viewing or thinking by the person as seeing himself as he was, from a distance (131 p 135). Indeed, remembering is a knowing mode of learning by which the child can "call up" or recall, in the present, learning content that he had mastered in the past. As it were, the child "stimulates" a relevant possessed experience and implements it here and now in the learning situation. Such possessed experience (foreknowledge) enables the child in meaningful ways to find relationships, acquire nodal points and find linkages with the new knowledge (learning content) with which he is confronted in the learning situation.

Further, it is important to mention that the so-called "calling up or putting existing knowledge in the present" also assumes an active accompaniment of the other gnostic-cognitive modes of learning.

When a child remembers at the same time he is actively involved in thinking, making particular representations, etc.

Remembering is also characterized by the fact that acquired *new* knowledge is not merely "added" to but becomes integrated into his existing possessed experiences. That is, new knowledge is meaningfully related to existing possessed experiences and thus there is mention of a quantitative increase as well as a qualitative deepening of the child's possessed experiences (132 p 138).

Sonnekus (133 p 86) emphasizes that effective learning is closely related to a child's ability to adequately remember by asserting the following: "Concerning learning, remembering as a lived experience plays an extremely important role in the learning historicity of children where established learning relationships from the past must be re-experienced in the present.

What has been said about the autistic child's deficiently making connections, generalizing, integrating new knowledge with existing possessed experiences as well as his poorer conceptual and insightful thinking, at the same time emphasize his inadequate remembering as a gnostic-cognitive mode of learning. A phenomenon such as the meaningless repetition of another's words (echolalia) that undoubtedly refers to the deficient meaning given to spoken language is only one of the autistic child's hindrances in remembering adequately.

The *autistic child* often shows a particular competence in being able to recall non-essentials or less important matters and most of all an errorless and unchanging recollection and recitation in the present such as specific sequences and rankings, times and dates, numbers, names of persons who have only temporarily intervened with them (hospital personnel), expressions, adages, long pieces of prose, or sometimes excel in a mechanical, rote memorization (134a p 163; 134b p 109). Things are precisely recalled just so and recited as originally learned without his *own interpretation and reformulation* of the involved content (135 p163). Thus no *integration of new knowledge with existing possessed experiences* occur and no varied ways of applying knowledge or transferrable insights are shown, as is evident from the following pronouncement by Wing ((136 p 123):

"Experiences appear to be stored exactly as they occurred, as programmes are in a computer, and can be reproduced, unchanged, in response to the appropriate stimulus. When they reach the stage at which they are asked to discuss the implications of the facts they have learnt, their handicaps become apparent". That the autistic child follows such a narrow, rigid existence and has become entrapped in formalisms (stereotyped ways of associating with reality) explain his rigid and one-sided memory and the fact that the development of thinking and fantasizing cannot occur (137 pp 109, 427).

According to Rimland (138 p 203) persons with a phenomenal memory that are often very one-sided very seldom are imaginative and creative and their reasoning is generally poor. Remembering, as a gnostic-cognitive mode of learning, that requires a supple, adequate grasp and implementation of language, is often lacking in the autistic child and consequently he seldom succeeds in quantitatively and qualitatively expanding his experiential world.

Remembering, also an important mode of learning in school situations, presents the autistic child with serious problems that contain an important task for teaching him (Read chapter 4).

f) Actualizing intelligence

1 The concept "intelligence"

When there is reflection on the actualization of intelligence, it is necessary to briefly elucidate this concept. Intelligence, a human cognitive potentiality (intellectual potentiality, ability), can only be perceived and evaluated after a person has succeeded in actualizing this personal potentiality by means of an action. Should this potentiality not be actualized for some reason, it remains latent or hidden and cannot be judged. Concerning the description or definition of intelligence, a number of authors have attempted to make a contribution and in this respect an essential danger is to fall into a narrow-minded view. Certain persons view intelligence, or more specifically its actualization, as an intellectual act or cognitive event, while others view it as an ability to learn, to think abstractly, to deal with symbols, to see relationships, to reason or arrive at

correct generalizations (139 p 9). In addition, intelligence is sometimes viewed as a person's general ability to purposefully direct his thinking to new problems in life, while there are others among which is that intelligence is qualified as an ability to break through relatively unfamiliar problem situations (140 p 9). Robbertse (141 p 31) even concludes that the ability to think and see relationships are the "sine qua non" of intelligence.

Sonnekus (142 p 311) describes intelligence as follows: "Intelligence is, within the totality of a person, the power to break through his "Umwelt" who in his association with the world is continually confronted by new situations". It seems then that according to Sonnekus it is justifiable to come to the conclusion that in his going out to reality via thinking, he is continually confronted with problem situations that he wants the break through via thinking, and intelligence is the power to break through in the act of thinking, particularly when this has to do with the newer in his relationship with the problematic.

2 Preconditions for actualizing intelligence

Intelligence is a potentiality at the child's disposal but as a cognitive way of being it must be actualized by the child's own initiative (144 p 85). Thus, this actualization is subject to the nature of the directedness of the child's intentionality. This directedness is co-determined, supported and propelled by a large number of powers and competencies. Actualizing intelligence as a way of being directed to the world occurs as an integrated part of the person as a whole and therefore may not be judge and evaluated apart from the child as a person and his affective and willing life, as an educand and as a child who learns via human association and encounter (145 p 44).

First, it is important to mention that the actualization of intelligence is a matter of consciousness. Thus, a person must stand open for reality to be there and addressable, accessible, influenceable, i.e., he must himself be able to answer positively to the enticements of the world, explore them and encounter his fellow persons.

On the one hand, intelligence can be actualized by an attentive-lingering-with the broken-through (146 p 88) problem situation and, on the other hand, it is a possible precondition for attentively being involved and remaining involved with the learning contents and problem situations.

In addition, a stable affective lived experiencing provides the impetus for actualizing intelligence as a cognitive way of being. It will contribute to an affective readiness, i.e., to a positive willful disposition to participate in the situations with which the child is confronted.

The adequate actualization of the accompanying modes of learning (*sensing* and *attending*) as well as the cognitive modes of learning (*observing, perceiving, thinking, imagining and fantasizing* and *remembering*) are necessary preconditions for actualizing intelligence because learning is realized as a totality.

Because the possession and adequate mastery of language lays the foundation for all modes of learning as well as for the actualization of intelligence, it is obvious that a person with linguistic deficiencies will not be able to fully realize his given intellectual potentialities. Because the various modes of learning mutually influence each other, especially because they are dependent on the adequate mastery of language, and especially because there is such a close affinity and interaction among language, thinking and intelligence, it is not surprising that the successful acquisition of spoken language is such an extremely important aim in teaching an autistic child.

Further, it is important to emphasize that a child must be helped and supported to fully actualize his intellectual potentialities. Consequently, he must be educated and didactically accompanied to the responsible actualization of his intelligence. To the extent that a child lived experiences stability or lability in the educative relationships, there is the possibility that he is going to actualize his intelligence admirably or under-actualize it. The state of educating in its affective, cognitive and normative structures of accompaniment is the foundation on which an accountable actualization of childlike intelligence rests (147 p 80).

3 The nature, quality and actualization of the actualization of intelligence by the autistic child

As far as determining the nature and quality of the intellectual potentialities of a withdrawn, language deficient preschool autistic child it is necessary to be aware that in fact such a matter will be extremely debatable if not impossible. Thus, it would be unaccountable and unacceptable to make firm pronouncements about his intellectual potentialities, about the possibility that such a child can eventually realize his intellectual potentialities, or to dare to predict his scholastically achievable level on the basis of mere speculation. Openness and the acquisition of language are essential preconditions for the actualization of intelligence by an autistic child and it can only be evaluated if it is actualized in one way or another.

On the basis of his withdrawn, "passive" way of existing (especially as found in the autistic preschool child) researchers such as Van Krevelen, Rimland and Rutter (148a p 123; 148b p 139) have incorrectly and summarily compared autism to mental deficiency. However, this view is rejected by the majority of researchers as is evident in the words of Wing (149 p 21): "Autistic children are not necessarily intellectually subnormal at all". Also Frye (150 p 3) holds the view: "Die generalisierende Behauptung des Autismus als Schwachsinn ist unserer Meinung nach falsch". As in the case of normal children, there is a wide variation in intellectual abilities (in their latent state) found in autistic children. After unfolding their human potentialities (openness), i.e., their intentionality, thanks to specialized educative teaching, the autistic child is then able to actualize and show his given intellectual potentialities.

A continuous exploratory directedness as well as a readiness to continually explore and expand the horizon of the known and familiar are important preconditions for actualizing intelligence. This spontaneous exploratory directedness, for which Rimland (151 p 177) uses the term "mental alertness", however, can only be entered after a time of giving the autistic child specialized educative teaching. Soon such a child shows this readiness to learn (as a

matter of willing) and makes the best of his intellectual talents thanks to the establishment of the necessary pedagogical relationships of trust and understanding between him and his teachers and a resulting genuine bondedness arises and he lived experiences safety and security.

The full-fledged actualization of intelligence also requires that a child's intellectual activities must continually show a suppleness, variability, complexity, the ability to integrate experiences into existing possessed experiences, to order, synthesize, make connections, to abstract, to transfer insights and apply them to problem situations simply because the use of intellectual power (intelligence) is required in all activities and situations in a person's lifeworld. With respect to the nature and quality of the intelligence of an autistic child who has already mastered a positive exploratory directedness, it can be asserted that it remains practically directed, excessively one-sided and inflexible, an imbalance between verbal and non-verbal intelligence is shown and there is uneven development in their various facets (152a p 91; 152b p 458). It is found that some autistic children are in a position:

a) to show outstanding achievement in simple construction work where the correct handling of building blocks, jigsaw puzzles or form board materials are required during an investigation of his intelligence;
b) to correctly handle and understand the functioning of various mechanical devices;
c) to select and place objects next to each other and to their described name as presented on matching little cards;
d) to carry out assignments requiring manual dexterity and spatial insight;
e) to show good recall of dates, calculations, numbers, persons with whom they are occasionally familiar, incidental facts or even trivialities;
f) to compute lightning fast;
g) to be able to accurately draw only a few objects;
h) to have a special propensity or "talent" for music (153a pp 11-12; 153b p 146).

In sharp contrast to these particular achievements, as "islands" of intelligence, it is, however, conspicuous that autistic children continually get stuck when confronted with intellectually demanding assignments that require adequate mastery of language, categorical abstraction, conceptual (abstract) thinking and reasoning, integration of knowledge, relating things, varied applications of personal insights, originality, imaginativeness and creativity (154a pp 11, 79, 86, 203-204; 154b pp 32, 163, 245; 154c p 431). Some researchers, however, fall into the trap of erroneously making extravagant claims and predictions regarding the autistic child's intellectual potentialities and achievable scholastic level on the basis of "encouraging signs" of skillfulness in successfully carrying out intellectual activities on a non-verbal level (155 p 13). Wing (156 p 151) directs the following warning about this: "It is dangerous and possibly misleading to use form boards and similar performance tests to make predictions about a child's general intelligence or ability to benefit from a particular type of education".

To be able to speak of the "intelligence" of an autistic child, it must be kept in mind that it has to do with the entire ability of a person who must be able to successfully *actualize* his intellectual potentialities in a variety of ways, under many circumstances and in any situation.

In summary an autistic child does not adequately actualize his intelligence because of an under-actualization of his intentionality, deficient mastery of language, labile affective life, stereotypic ways of associating with reality and aloofness.

2.5 SYNTHESIS

In the present chapter it continually emerged that, as a total event, learning is realized in terms of the accompanying modes of learning (sensing and attending) and the gnostic-cognitive modes of learning (observing, perceiving, imagining, fantasizing, remembering and actualizing intelligence). In addition, it appeared that there is a close affinity and interdependence among the various modes of learning because they continually support and propel each other. It

also came to light that childlike learning requires that a child take a personal position as a totality-in-function.

A look back at the actualization of learning by an autistic child shows that attentively-being-in-the-world, as a primordial learning potentiality, appears there as attenuated and as being less aware of reality in a humanly appropriate way.

Because of a labile sensing, as a mode of learning, an unlocking of and for reality by attending occurs with difficulty for the autistic child, especially because of an under-actualization of intentionality. The weakened attending gives rise to a poor mastery of language and his imprisonment in a rigid, stereotypic way of being hinders the gnostic-cognitive modes of learning from arising and being actualized.

Thus, an under-actualization of learning occurs with the autistic child-in-education that includes an under-actualization of the potentialities of his psychic life and a limitation in the expansion of the horizon of his experiential world.

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