

Some psychoanalytic viewpoints on neuropsychiatric disorders in children

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The author addresses issues interfacing neuropsychiatry and psychoanalysis. He recommends psychoanalysis for children with Attention Deficit, Hyperactivity Disorder (ADHD) and Dysfunction in Attention and activity control, Motility control and Perception (DAMP). He attributes its low status in neuropsychiatric treatment recommendations partly to the fact that psychoanalysts do not always declare their specific field of investigation. The scientific community then assumes that psychoanalysis aims to comment on issues outside its field of investigation, e.g. on neurobiological aetiology. The community therefore fails to discern the psychoanalyst's specific task, to help the child express and work through his conscious and unconscious experiences. Clarity on the analyst's part will improve relations with the scientific community and facilitate a relevant comparison of treatment methods. Another reason for neuropsychiatry's negative attitude towards analysis is its unwillingness to accept that unconscious conflict influences behaviour. With theoretical and clinical arguments, the author argues that unconscious factors must be taken in to understand and to treat the child. Countertransference, often cumbersome with neuropsychiatric children, becomes easier to handle if the analyst is clear about his field of investigation. If he sees through simplistic formulations on aetiology, countertransference gets even more manageable. Psychoanalysis can result in considerable intellectual and emotional development, as illustrated by work with a latency boy with DAMP, autism and slight mental retardation. In his psychoanalytic theoretical framework of the case, the author unites ego-psychological formulations with a Bionian conceptualisation of the thought disturbance.

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Introduction

Neuropsychiatric disorders in children cause controversies in media in which parents, critics and scientists state their positions. The heat of the debate seems incomprehensible, but for anyone confronted with the turbulent and bewildering manifestations of these disorders, a disinterested stance becomes impossible. When parents seek psychoanalysis for their child, a challenge faces the analyst: are the conditions amenable to analysis? If so, with what technique, and with what hopes of achievement? His answers to the questions will depend on how he defines his task as analyst, and how he defines the proper field of the psychoanalytic investigation. These issues, in their turn, link to his theoretical psychoanalytical models, and whether he can and wants to link them to neurobiological explanatory models. In the end, these questions heavily challenge his countertransference. I will start my discussion of these issues with a vignette.

A case vignette

The parents of 6-year-old Anthony seek analysis. ‘Something torments him. It is not related to his handicap. He cannot speak about it and we don’t know how to help him.’ His development has lagged behind since the age of 2. His speech has been immature ever since. He cannot concentrate on learning tasks, nor be among peers. He is placed in a nursery home for psychologically handicapped children. He seems happy but is also afraid of animals and street vehicles.

At 4, he was diagnosed at a university clinic with DAMP, autistic traits and slight mental retardation. DAMP is a neuropsychiatric diagnosis akin to ADHD, which I will discuss later on. Autistic traits were diagnosed since Anthony walked about with a plastic gadget in his hand, rejecting physical contact. His retardation was established by thorough psychological developmental tests.

At our first meeting, Anthony comes to my office with his mother. It is a puzzling encounter. He is a nice boy with open and curious eyes, but is also restless and frightened. He is very hard to understand as he skips consonants and reduces vowels. He wanders about naming colours, as when wondering whether a blue crayon is of the same colour as the white wall. The meanings of words and drawings seem fleeting. He points at one of the squiggles he restlessly produced: ‘A heaven. No, a star! A house. No, a window’. Listlessly, he moves from one activity to another, as when he makes a plasticine snake and then puts it away. When he seems anxious, he stutters and sucks air, giving the impression of tics. His neurological dysfunction is also demonstrated by his nystagmus and a slightly atactic gait.

In my countertransference, I am filled with feelings of worry and hopelessness, and ask myself whether psychoanalysis is suitable for him. His parents are committed and they urge for help, and he is well anchored in a rehabilitation centre. These factors support psychoanalysis. But, what are his own assets for benefiting from it? There seem to be two confused people in my office: a young boy wondering why he is here, and an analyst wondering what to decide.

While I muse on this, I notice our contact is hard to understand. He smiles much, but I do not know if it is friendly, forced or evasive. When he notices my interest in a topic, he changes subject. His colour examination reminds me of all the psychiatric and nursing staff he has encountered. In his ‘preformed transference’ (Meltzer, 1967), he puts me in the position of a professional who is in charge of checking his colour knowledge. Hindsight makes it clear that I asked the ensuing question not only to understand what goes on between us, but also to relieve myself of the countertransference pressure. I ask him: ‘You told me about Mom and Dad. What about them?’

Instantly, Anthony goes to a cupboard. Its left half is open to furnish him with crayons, paper and plasticine. Now, he reaches for its right, locked half. He grabs its handle and looks straight at me. He seems desolate, or frightened.

A: You want to get into the other half of the cupboard?

P: Yes.

A: But you are not allowed to.

P: I want to!

A: Tell me, what’s inside the cupboard?

P: A worm ... no, a snake. Open the door!

My question made him move anxiously to the door. I did not understand why he walked to the cupboard and what he so eagerly wanted in it, but I did notice that my countertransference pressure lessened immediately and my analytic capacity was vitalised. I was thrilled because he expressed affects and fantasies with a symbolic content. Henceforward, I just had to safeguard the analytical frame and ask for his fantasies. This set in motion a dawning psychoanalytical process, which convinced me to accept Anthony in an immediately commencing analysis, four times a week.

In a new meeting with the parents, I explained the analytic frame to them, including my wish to safeguard confidentiality about what Anthony and I speak about. I would meet them rather sparsely for check-ups. If they wanted to contact me in between, I would arrange a meeting at short notice. The parents accepted, and psychoanalysis began.

The closed door

During Anthony's psychoanalysis, the locked cupboard door evolves into a metaphor for his epistemological problems. How will he know about that which is not immediately before his eyes, like where the sounds outside come from? What about things he cannot learn to know, like what the analyst does when not meting him? Similar questions apply to the inner world: how is he to know about it? To Anthony, the answers seem to reside behind a locked and unyielding door.

The locked door also becomes a metaphor for my countertransference. This boy, with his grave diagnoses and incomprehensible behaviour, seems secluded and inaccessible. My free-floating attention, my 'negative capability' (Bion, 1970, p. 125) is put under pressure. When working with neuropsychiatric children, other factors, too, can lock the door to the analytic function. The child's encounters with staff members of his psychiatric rehabilitation programme can dilute the intensity of the analytic relation. The analyst's knowledge of the staff's attitudes towards psychoanalysis affect him. Information about organic damage in the child can make him think the case is unsuited for analysis. Such misgivings made me hesitate before the 'closed door' of Anthony.

When the analyst seeks scientific information on neuropsychiatry, he runs into yet another closed door. Many participants in the neuropsychiatry debate are convinced of their infallible points of view and slam the door against their opponent's opinions. Some say these children's brain dysfunctions are neglected and the symptoms wrongly attributed to psychic conflicts. Others say the disorders are children's reactions towards deleterious changes in society, reactions that are medicalised by neuropsychiatry. It is hard to find the calm to form a psychoanalytic opinion, be it about a particular patient or about the claims of neuropsychiatry. I will now relate some of its findings and diagnoses.

Neuropsychiatry

Neuropsychiatry concerns itself with some behavioural disorders, the neurological and psychological symptoms of which are considered caused by minimal disturbances in neurological function. Neuropsychiatric disorders are common, affecting 5–10% of children. The main neuropsychiatric disorders are ADHD, DAMP, Asperger's and Tourette's syndrome, and autism. ADHD is a diagnosis based on a DSM-IV checklist

of symptoms. It requires positive symptoms within the categories of lack of attention, hyperactivity and impulsivity. Other conditions of duration and lack of co-morbid disorder must also be fulfilled. DAMP has gained acceptance mainly in the Scandinavian countries. Gillberg (1996) describes its neurological disturbances. Briefly, DAMP comprises the symptoms of ADHD plus motor disturbance or, more rarely, plus perceptual disturbance. DAMP is linked to a more uneven IQ profile than ADHD.

Neuropsychiatry is founded on the view, based on substantial scientific evidence, that these disorders are caused by organic factors. 'Psychosocial factors do not seem, without concomitant brain dysfunction, to cause the basic disorder in DAMP' (Gillberg, 1996, p. 134, my translation). As for ADHD, Teeter concurs that it is a 'biogenetically-based disorder most likely involving frontal lobes, basal ganglia, and other attentional networks that control and regulate motor activity, attention and inhibition' (1998, p. 26). The anomalous brain function causes the deficits in functional skills, which then cause problems in academic, psychosocial and family adjustment, viz. what we register as symptoms (p. 39).

Barkley's research and theories on ADHD have had a major impact on neuropsychiatry. Concerning aetiology, he formulates himself cautiously:

... although multiple etiologies may lead to Attention-Deficit/Hyperactivity Disorder (ADHD), evidence points to neurological and genetic factors as the greatest contributors to this disorder ... Nevertheless, most findings on etiologies are correlational in nature and do not permit direct evidence of immediate and primary causality (1998, p. 164).

He lists a number of studies, which indicate disturbed brain function in ADHD: pathological quantitative EEG, decreased metabolic activity in the left anterior frontal region, morphological changes evidenced by Magnetic Resonance Imaging. He emphasises: 'Important to understand here is the problem of very small sample sizes employed in many of these studies' (p. 167), but yet he states that 'abnormalities in the development of the frontal-striatal regions probably underlie the development of ADHD' (p. 168). He attributes heredity to constitute 'one of the most well-substantiated etiologies for ADHD' (p. 170), while research has greatly reduced the 'support for purely social or environmental factors as having a role in the causation of this disorder' (p. 177).

Barkley's model of ADHD

According to Barkley's model, ADHD is a disturbance of behavioural inhibition. Out of ADHD's 'holy trinity' (1998, p. 57), namely, inattention, impulsivity and hyperactivity, only impulsivity defines the disorder. Attention and activity level are not exclusively low or high, respectively. Impulsivity, however, is constant. The children

...respond quickly to situations without waiting for instructions to be completed ... These children may also fail to consider the potentially negative ... consequences that may be associated with particular situations or behavior ... Waiting one's turn ... is often problematic for them ... They are notorious for taking shortcuts (p. 59).

According to Barkley, the child gets impulsive because he cannot inhibit his behaviour. This creates attentional problems secondarily. Normally, a 'behavioural

inhibitory system' (BIS) enables certain 'executive functions' to work. They consist of non-verbal and verbal working memory, self-regulation of affect, motivation and arousal, and reconstitution (internalisation of play). They represent 'private, covert forms of behavior that at one time in early child development and/or in human evolution was entirely public and outer/other-directed in form' (p. 233). When these functions work, a system of motor control, fluency and syntax works smoothly without the need for exterior control. The child can now control his behaviour.

The core problem in ADHD is the malfunctioning BIS that prevents the executive functions from developing properly. BIS, a system of self-regulation, is located in the prefrontal cortex. 'Increasing evidence... suggests that ADHD may arise from deficiencies in the development, structure, and function of the prefrontal cortex and its networks with other brain regions, especially with the striatum' (p. 248).

Treatment, according to Barkley, should be based on an understanding of the consequences of defective behavioural inhibition. Special pedagogy teaches the child to substitute the defective inhibition by external control. The child should be helped with the lacking internalisation of speech function, though Barkley does not suggest this should be done by a psychotherapist.

Only a treatment that can result in improvement or normalization of the underlying neuropsychological deficit in behavioural inhibition is likely to result in an improvement or normalization of the executive functions dependent on such inhibition. To date, the only treatment that exists that has any hope of achieving this end is stimulant medication or other psychopharmacological agents that improve or normalize the neural substrates in the prefrontal regions that likely underlie this disorder (p. 252).

Psychoanalysis in neuropsychiatric disorders

Defining aetiological claims, fields of investigation and method

One of the most heated issues in the neuropsychiatry debate concerns aetiology, which is often discussed in general and sweeping terms. My view is that psychoanalysis, as a research instrument, is instrumental in establishing *individual* ADHD aetiology. We get support for this view from Barkley's discussion of hereditary factors. Genetic studies indicate that 'shared' (p. 172), i.e. general environmental factors account only for a small part of individual differences in ADHD, while a greater part of the variance is due to 'nonshared', i.e. personal, non-genetic factors.

Thus, if researchers were interested in identifying environmental contributors to ADHD ... such research should focus on those biological, interactional and social experiences that are specific and unique to the individual and are not part of the common environment to which other siblings have been exposed (p. 172).

The psychoanalytic method responds to this challenge by its focus on the 'interactional experience' 'unique to the individual'. Psychoanalysis is suitable for establishing individual aetiology, but not for making generalisations about pathogenesis.

Barkley's discussion challenges the analyst to define what aetiological claims psychoanalysis reasonably can make. In Freud's early psychoanalytic publications, he often discusses the aetiology of neuroses. He introduces an 'aetiological equation of several terms which must be satisfied if the effect is to take place' (1895, p. 135). He lists these terms:

- ▲ precipitating or releasing causes, immediately preceding the emergence of the effect
- ▲ preconditions, without which the effect would not come about
- ▲ a specific cause, which is never missing in any case, and which suffices if it is present in the required intensity, provided that the preconditions are also fulfilled
- ▲ concurrent causes, which are not necessarily present every time, and which cannot produce the effect by themselves alone.

I suggest the analyst use the equation as a mental scheme, not in the clinical situation, but when he considers to designate some factor as aetiological. If, for example, he were to find some psychological factor at work in an individual case, he should bear in mind that 'A single pathogenic influence is scarcely ever sufficient; in the large majority of cases, a *number* of aetiological factors are required, which support one another and must therefore not be regarded as being in mutual opposition' (Freud, 1906, p. 279). This should make it clear to him, as a researcher of the individual experience, that he is not entitled to state generalised psychological aetiologies. Freud's equation also casts a sobering light on the aetiological factors listed by Barkley. Despite Barkley's caveats about multiple aetiologies, his formulations imply prefrontal aetiology in ADHD. To my mind, the brain research results should rightly be listed as, and only as, concurrent causes of ADHD, not as preconditions and not as precipitating or specific causes.

The analyst must also clarify his field of investigation and his method. I define the psychoanalytic method as a process where I immerse myself in a clinical situation saturated with unconscious transference and countertransference import. My analytical instrument (Balter, 1980; Norman, 1994) perceives the unconscious messages by way of resonance (Salomonsson, 1998). The field of investigation is the patient's and, regarding the countertransference, my own experiences expressed in the analytic session. We start with the conscious experiences, yet the ultimate goal is to reach the unconscious ideas. We hope the child will describe to us his experiences, what they mean to him and what motivated them.

The nature of the psychoanalytic method and its field of investigation make it unsuited for statements on neurobiological aetiology. Neither the method nor field of investigation justify causal explanations at the level that causality is used in natural sciences. If the analyst expresses himself clearly on this, he can hopefully reduce neuropsychiatry's resentment against psychoanalysis on the charge that it makes unjustified declarations about causality. On the other hand, the analyst can assert that statements on individual psychological aetiology made by neuropsychiatry must by necessity be cursory and mute on unconscious factors, due to the nature of the neuropsychiatric field of investigation.

This discussion has important bearings on the psychoanalytical situation, into which information sieves from neuropsychological tests, neuropsychiatric investigations and

pedagogical findings. It is crucial to reflect on how this influences analytic activity, transference and countertransference. The analyst must assess when he judges extra-analytical information *qua* analyst or *qua* non-analyst, respectively. This is not always easy, as illustrated by my encounter with Anthony. My previous knowledge about his diagnoses and early history affected my immediate understanding. When perceiving his unclear speech and straying behaviour, I anxiously thought: Is he too damaged to benefit from psychoanalysis? My question about Mom and Dad was motivated by my desperation: 'This boy is damaged, the situation is hopeless'.

Whether extra-analytical information adds to, or detracts from, our psychoanalytical understanding must be analysed in each situation. According to my experience, extra-analytical information easily complicates psychoanalytical understanding. Thus, any external material received should be handled with care. This is extra important initially in treatment, before a solid psychoanalytical process is established.

Once these caveats are considered, the analyst can rightfully defend a psychoanalytic treatment for the child. I thus argue against neuropsychiatrists who claim these children should be dissuaded from psychoanalysis. Gillberg writes:

In earlier childhood years, many have difficulties in concentrating on conversational therapy, which they tend to experience as irrelevant, even incomprehensible (1996, p. 170).

As for psychotherapy with teenagers, he advocates it provided the therapist has 'profound knowledge' of DAMP.

Therapy might well be insight-oriented, but must generally include considerable moments of summary, concretisation and even advise and support (ibid.)

I hold the view that these children benefit from a well-conducted psychoanalytic treatment. They often quickly become interested in a psychoanalytic discourse, because they want to express and get a hold on their experiences. Psychoanalysis helps the child deal with the experience of having this disorder or, as the child thinks of it, of being that very child. Before illustrating with further case material, I will present existing psychoanalytical models of neuropsychiatric disorders.

Psychoanalytic models of neuropsychiatric disorders

Psychoanalytic papers on neuropsychiatric disorders are rather sparse. One reason might be inferred from Gilmore, who points to a conflict between an intersubjective psychoanalysis and one that links psychoanalytic with neurobiological constructs: 'A brain-centered psychology is not a relational psychology' (2000, p. 1272). This might make object-relations analysts avoid if not treating, then at least theorising about neuropsychiatric disorders. Schaff (2001, p. 553) discusses another reason for an analyst to doubt his capacity. The intrapsychic tensions of the hyperkinetic child will easily be projected on to the group of helpers. If a part of the child's personality that feels irrelevant, powerless and stupid is projected on to the analyst and he unconsciously identifies with the projections, he will not initiate treatment. Finally, neuropsychiatry's strong position also detains analysts from seeing these patients.

The reasons for the American predominance in the literature lie open to speculation. American analysts, more than their European colleagues, integrate analytical and neurobiological explanatory models and treatment approaches. One also discerns transatlantic differences in the views on transference, a point I will develop when I account for ADHD as a disorder in self-regulation. Finally, the ego-psychological tradition is stronger in the US. Since ego-psychological concepts are more akin to neuropsychiatric terminology than are object-relations concepts, this might be another reason for the American interest in these disorders.

One example of an American ego-psychological perspective is Gilmore, who views ADHD as a ‘disturbance in the synthetic, organising and integrative function of the ego’ (2000, p. 1260) and believes that the inconsistency and variability of these ego functions constitute the disorder. She understands it as a syndrome that presents as a ‘... complex mixture of neuropsychiatric and neurotic components, and ... is often improved by medication but in many cases optimally treated with concurrent psychoanalysis’ (ibid.). Since ‘the process of interpretation does in fact address the ego impairment’ (p. 1274), psychoanalysis is an important treatment, which provides ‘an empathic but continuous integrative force: that is, the interpreting analyst’ (p. 1288). In my final vignette, we will find an instance where Anthony’s confusion and panic is promptly relieved when his anger and fear of me is interpreted.

Dyslexia is often coexistent with ADHD symptoms. It can be conceptualised as a neurologically based disorder as well as an ego-deficit. Migden shows how dyslexia can aggravate oedipal conflict solution: ‘Lacking the ego resources, especially the language competence, of the non-learning-disabled child, the youngster with dyslexia is robbed of one of the human organism’s most basic tools for impulse control’ (1998, p. 286). During the oedipal phase, ‘language-based ego functions replace the sensorimotor’ (p. 288). We thus encounter ‘a modulated type of phallic aggression (often evident as intense competitiveness) in oedipal and latency-stage boys’ (p. 287). My final vignette contains an instance of this.

In an issue of *Psychoanalytic Inquiry* (2002) on ‘Self-regulation: issues of attention and attachment’, an effort is made to present a comprehensive psychoanalytic theory on neuropsychiatric disorders. Self-regulation is defined as an ‘interpersonally developing capacity to modulate states of arousal and to organize behavior in meaningful, predictable ways’ (Carney, 2002, p. 299). ADHD is viewed as a disorder of self-regulation for which psychoanalysis is an important treatment method. Concerning aetiology, Levin writes ‘...most often ADD¹ is the result of genetic loading ... What is emerging is that ADD can also be acquired, for example, as a consequence of brain infections’ (2002, p. 339). ‘There is no consensus regarding what is primary in the ADD patient: the core cognitive deficit or the personality problems’ (p. 346). Judging from his neurobiological emphasis, Levin seems to regard it as basically a biological disorder with emotional sequelae. It is unclear if he draws his conclusions from neurobiological findings or from the analytic situation. When he suggests to ‘think together with the patient about what is a more likely explanation, the presence of a

¹The terms ADHD, AD/HD and ADD are used interchangeably in my article, according to which source I am quoting. There are neuropsychiatric reasons for their different uses, mainly referring to whether H = hyperactivity is regarded as an obligatory symptom or not.

transference, or the manifestation of a cognitive deficit, or both' (p. 350), it is obvious that his psychoanalytic field of investigation is broader than mine, as I delimit it to the transference–countertransference relation.

These authors recommend psychoanalysis, but criticise a technique which overlooks that a symptom does not necessarily reflect a psychic conflict but a neurobiological deficit. They advocate against a technique that restricts itself to interpreting the transference but not the cognitive deficit. 'Freudian analysts need to be careful; for example, apparent slips of the tongue may not reflect anything conflictual but rather, they may indicate cognitive slippage. Or they may capture both conflict and deficit simultaneously' (Levin, 2002, p. 341). He warns against being 'too quick to make interpretations in terms of transference explanations' (p. 350).

Levin cautions against premature interpretations on unconscious transference significance. However, the psychoanalytical method per se does not welcome such behaviour by the analyst. To my mind, another analyst who would include neuropsychological and neurobiological realities in his interpretations would also make statements unwarranted by the psychoanalytical method. An analyst cannot state to what extent a manifestation is a transference manifestation or a cognitive deficit. He can only pursue his task to tentatively interpret the unconscious meanings of affects, thoughts and behaviour—and how the patient defends himself against them. Doing this, he will discover that to divide clinical manifestations into transference and cognitive deficit, respectively, is artificial.

Integrating psychoanalytical models of ADHD and DAMP

Introduction—Anthony's vignette continued

I will now combine constructs from ego-psychology and post-Kleinian psychoanalysis, notably from Bion's writings, to psychoanalytically conceptualise ADHD and DAMP. Let us return to the clinical vignette to get fresh food for thought.

When I asked about Mom and Dad, Anthony went to the locked cupboard door. My dazzled countertransference turned into interested speculations: 'Does he want to get into the cupboard to avoid my question? Or is the scene an answer to my question? Does he feel locked out from his parents and does he want to get into them? Does the snake inside the cupboard indicate revenge that will befall him if he intrudes?'

Anthony leaves the cupboard and walks to the front door. It has a Venetian blind covering a glass window. He grabs it and starts crying. He wants to go to Mummy. 'I am afraid of the blind!'²

I feel compassion for the crying boy, and guilt: 'Maybe psychoanalysis is unsuitable, maybe I confine him in my office?' However, I stick to my psychoanalytical task of investigating his experiences.

A: Tell me about the blind!

P: It is dangerous! It bites!

²In Swedish, the word for Venetian blinds has no connection to being blind.

I am uncertain why Anthony is afraid of the blind. Earlier, he was frustrated at the cupboard. Now, he tries to force his way through the blind but feels it attacks him. I intuit that he gets scared of his dangerous wishes and thoughts. If he can't get rid of them, they return as a biting blind.

My intuition gets support later in the analysis, when my office becomes more and more dangerous. Anonymous items lie in wait wherever he tried to do mischief. At every door lock, radiator valve and window lock, something terrible might happen to him or the things in the room, he cannot tell which. At these places, 'rowdy thoughts' reside. They also dwell inside him. They are terrifying fractions of a thought, which must be evacuated from his body. If not, they lead to catastrophe. They consist of the forbidden impulse and its punishment.

Retrospectively, I interpret that the blind personifies his forbidden thoughts, but in a distorted form. His anger with me is redirected on to himself in the form of horrendous, biting bits of thoughts. It is only later in the analysis that Anthony can express himself on this. Initially, he goes to the loo instead. When the rowdy thoughts hit him, he stops all activity and conversation and rushes to the toilet. After defecation he returns relieved, and does not want to talk. Still later, he wonders desperately: 'What am I to do with these rowdy thoughts? Can one cut up the stomach and take them away?'

Thought disturbance in ADHD and DAMP—The instinct for knowledge and the containing object

One of my hypotheses is that Anthony's 'rowdy thoughts' reflect *a disturbance in his thought apparatus due to his internal object's inability to contain his wishes and affects*. Freud's *Three essays on sexuality* provide the first piece of theoretical background:

At about the same time as the sexual life of children reaches its first peak ... they also begin to show signs of the activity which may be ascribed to the instinct for knowledge or research ... Its relations to sexual life ... are of particular importance (1905, p. 194).

In the Little Hans case (1909), he links this instinct to a sadistic research of the interior of the infantile objects. Klein develops this theme: 'The sadistic phantasies directed against the inside of her [the mother's] body constitute the first and basic relation to the outside world and to reality' (1930, p. 221); '... it is essential for a favourable development of the desire for knowledge that the mother's body should be felt to be well and unharmed' (1931, p. 241).

Klein (1946) developed her observations on the child's relation to the internal mother into a theory of projective identification. Bion later suggested that this process is fundamental for the capacity for thinking to develop. The thinking apparatus is born in an emotional relation with the mother. This relation essentially consists in her handling the child's projective identifications on to her—and the child receiving back her digested mental material. Later, the child internalises this maternal capacity in the form of an alpha function. 'Thinking depends on the successful introjection of the good breast that is originally responsible for the performance of alpha-function' (Bion, 1963, p. 32). The alpha function, the capacity to handle the frustrating situation, transforms sense

impressions and feelings into alpha elements, which can be stored and used for dream thoughts. Affectively meaningful symbols are now available.

However, if the real and satisfying breast does not appear when the preconception 'breast' appears in the child's mind, then an internal, tantalising 'no-breast object' is created instead. Transformation into alpha elements is jeopardised and beta-elements are stored instead. They are 'not amenable to use in dream thoughts but are suited for use in projective identification' (Bion, 1962, p. 6). If the child does not feel that the container, who in the child's mind is the mother, manages to handle his projections, he is in trouble. This is especially true for the neuropsychiatric child. If we call to mind that Freud, and even more so Klein, link the instinct for knowledge with sadistic attacks on the mother, we understand why *the child easily interprets non-containment as a punishment for its sadistic attacks*. He is then trapped in a *vicious circle of guilt and renewed attacks*.

Let us apply these concepts to the clinical situation. Retrospectively, I interpret the cupboard to represent an object that might contain the desperation, which my question elicited in Anthony. However, when he finds the door locked, he cannot reach containment. The door bars something that could soothe him, as it closes to his projective identifications of beta-elements. They bounce back on him in the form of a gruesome snake. At the blind, the container is further transformed into a biting monster. The blind is a bizarre object composed of 'beta-element plus ego and superego traces' (Bion, 1962, p. 25). It reflects Anthony's lust to bite plus his sadistic superego. His only way of dealing with the situation is to try to run to mother.

Anthony's alpha function is thus inadequately developed. It comes as no surprise when he reveals his terror of ghosts. He cannot speak about them, but intimates that they threaten him at bedtime. Analysed in the transference, their function becomes clear. They appear at bedtime because I am not there to soothe or contain him. This makes him angry with me. The ghosts are, so to speak, my vengeful phantom. Unlike the rowdy thoughts, they cannot be defecated away. He can only wait until they have waned.

Formulated in object-relations, Bionian terms, Anthony's impulsivity is based on a thought disturbance construed thus: he cannot wait, but takes shortcuts and throws himself from one activity to another, because one second's frustration activates aggressive or libidinal fantasies for which he finds no containment. Instead, he experiences the return of his beta-elements in the form of terrifying bizarre objects. Since he believes they concretely reside in the external object, he tries to escape from them and becomes hyperactive, unruly or listless. His impulsivity and restlessness are, from a subjective point of view, an incessant flight from an external object that threatens him because he has attacked it.

According to my experience, children with DAMP and ADHD find no containment for their emotions, which they often experience as 'nobody understands me'. They perceive the environment as rejecting, but what is crucial is their rejecting *internal* containing object. This needs to be conveyed to parents who often accuse themselves of bringing about the disorder. When told that their child seems to have a problem with his inner world, and that they should go on raising their child to the best of their ability, they are relieved. Apart from this, they might need a special pedagogue to help them deal with their child's difficulties.

Time handling in ADHD and DAMP—Aspects on memory traces and affect discharge

According to my second hypothesis, Anthony is *unable to create memory traces of a satisfying object when he meets with a frustration*. Instead, affect discharge and impulsivity follow, which manifest themselves as his *difficulties in dealing with frustration and time*. My theoretical background is Freud's notion of how frustration is necessary for thoughts to arise in the psychic apparatus. In *The interpretation of dreams* (1900) and 'Formulations on the two principles of mental functioning' (1911), he describes how thinking develops when hallucination, the primary method of dealing with frustration, cannot satisfy a wish. The pleasure principle must yield to the reality principle, hallucinations to thoughts. As the reality principle becomes established, several mental functions develop: a consciousness, registering impressions from the outer world, attention, memory, judgement and fantasy (Freud, 1911, pp. 220–2). Together, they enable the mental apparatus to tolerate increased tension.

Since hallucination and affect discharge do not afford satisfaction, they must be *delayed*, a point made by Rapaport (1951). Delay presupposes a sense of time, a sense of 'later ...' By creating a time sense, so alien to the unconscious (Freud, 1915, p. 187), the *Pcpt-Cs* system enables a capacity for delay to develop. Freud suggests that the handling of time is important for impulse control, when he writes,

... our abstract idea of time seems to be wholly derived from the method of working of the system *Pcpt.-Cs.* and to correspond to a perception on its own part of that method of working. This mode of functioning may perhaps constitute another way of providing a shield against stimuli (1920, p. 28).

The idea of time creates a stimulus shield by a mechanism described by Rapaport:

Therefore the expenditure of cathexis in affect-discharge and in making the memory-image hallucinatorily vivid has to be prevented, that is, discharge must be delayed. Small amounts of the energy saved by this delay will be used by the thought-processes to prepare for finding the need-satisfying object in reality (1951, p. 325).

As the child delays discharge, i.e. masters time, he can ward off his importunate impulses. He saves experiences of the satisfying real object as memory traces, which he can use later to find the real object and seek assistance. 'Cool down, recall and wait' is the formula.

If the child cannot institute memory traces of a satisfaction as bulwarks against affect discharge, his time sense does not develop properly and he cannot wait. Barkley calls it 'temporal myopia' (1998, p. 247). Anthony's ego cannot create or reach memory traces that express the longed-for wish-fulfilment. When he accesses neither the real satisfying object nor his memory traces of it, he panics. At the blind, Anthony cannot conjure up memories of soothing situations with his mother. He must have her there and, when she is not, he cries.

To sum up my two hypotheses: Anthony's inability to wait results from his ego deficiency and from his deficient internal containing object. His impulsivity can be viewed both as an ego pathology and as his reaction to a rejecting, non-containing internal object. An analyst may choose to formulate his patient's pathology in terms of ego-psychology or object-relations theory, and link it to the findings of neurobiology or

not. Clinically, the important thing is to follow how the pathology manifests itself in the transference, in which the child projects his internal object on to the analyst. It is not until the analyst can properly interpret the transference relation as a reflection of this object that the child has a chance to repair his ego disturbance.

Further remarks on aetiology

The analyst also needs to address another issue to relieve himself of his countertransference burden. I refer to the discussion on the aetiology of neuropsychiatric disorders. I want to argue that the analyst need not refrain from initiating analysis out of fear that this would mean to begin at the 'wrong end' of an aetiological sequence. As a countertransference feeling, his fear deserves to be taken seriously, but, as a conviction, it is logically unfounded. It is important to analyse this feeling, because it provides one reason why analysts hesitate to suggest analysis for these children. Analysts know that the analytic frame provides that calm continuity and minimal stimulus input, which neuropsychiatric treatment regimes recommend. Studies by Fonagy and Target (1996) and Heinicke and Ramsey-Klee (1986) indicate that in order to improve from psychotherapy, these children need the high frequency of psychoanalysis. Regrettably however, analysts still hesitate and psychoanalysis is seldom regarded as a treatment of choice.

As if the countertransference situation were not complex enough due to the children's symptomatology and the complex treatment situation with several persons involved, the aetiology debate adds still more weight to the analyst's countertransference. If he scrutinises the discussion on neuropsychiatric aetiology, he will understand its often simplistic arguments and reductionistic claims. Then, he can meet his countertransference fears with solid arguments.

Brain research indicates that aetiological sequences go in both directions. Physical events sometimes result in psychic events, and sometimes it is the other way around; psychic events give rise to changes in brain tissue. A diversified view on aetiology is thus warranted. Barkley (1998) and Hüther (2001, pp. 473–4) list unequivocal changes in ADHD populations concerning transmitter substances, morphology, neuronal activity and behaviour. The critical question though is, as Hüther puts it, what are the causes of, and what are the consequences of the disease?

The simple argument goes that when a psychic disturbance correlates with a demonstrated brain dysfunction or anomaly, the psychic is caused by the physical. However, neurobiological research shows that brain changes can be caused by adverse psychic circumstances. An accumulating literature shows that stress gives rise to brain changes in animals (Nelson, 1999; Kaufman and Charney, 2001; Dawson et al., 2000). Changes have been demonstrated in the HPA axis (Hypothalamus-Pituitary-Adrenals, where stress is managed) and medial prefrontal areas. The changes are both morphological, such as decreased number of axons, and chemical, such as decreased amount of transmitter substances.

There is abundant knowledge on which kinds of stress induce neurological changes, e.g. separation (Kaufman and Charney, 2001, p. 457) and an unpredictable environment (Dawson et al., 2000, p. 700). Early experience affects brain development selectively and discontinuously, mostly during the critical periods of brain development (Nelson, 1999, p. 420; Knudsen, 1999, cited in Dawson et al., 2000, p. 699), that is 'periods in development

during which specific types of experience are needed for the brain to develop normally' (Dawson et al., 2000, p. 699). 'The maternal deprivation and postnatal handling animal studies highlight the importance of early experience on the development of the brain and multiple transmitter systems' (Kaufman and Charney, 2001, p. 458). Thus: 'Across a variety of species, there are now numerous demonstrations using a variety of species showing that positive or negative early life experiences can alter both the function and structure of the brain' (Nelson, 1999, p. 421).

Schore (1997, 2002) proposes an aetiological model on human subjects in which deleterious early psychic experiences negatively affect the physical development of the right hemisphere, notably its orbitofrontal cortex: 'During the first two years of life, chronic and cumulative states of overwhelming, hyperaroused affective states, as well as hypoaroused dissociation have devastating effects on the growth of psychic structure' (2002, p. 460). These affective states result from derailed interactions between mother and child. Schore's point is that such interaction results in a disordered development of the right hemisphere, dominant for 'non-conscious reception, expression, and communication of emotion ...' (p. 445) and emotion control. The brain's highest level of monitoring and autoregulating affect states is the right orbitofrontal cortex (p. 447), which will not develop properly if mother and child fail to develop 'affective transmissions in mutual gaze transactions' (1997, p. 10). Schore's model thus diversifies one-way etiological discussions. He shows that adverse psychic events can have pathological psychic effects.

Neither the animal studies nor Schore's model are specific to ADHD. I bring them out to substantiate the conclusion that pathological changes in brain anatomy and function are not automatically *the* aetiology of a psychic disorder. The closer we look into the aetiology of psychic disorders, the further we move into a territory where nature and nurture coalesce, and where innate and acquired brain changes interact. Put in terms of Freud's aetiological equation, we would be wise not to fix any factor as a necessary precondition for ADHD. No brain anomaly or psychological factor has been proven to fulfil such requirements. Rather, they are best seen as concurrent causes.

What does this discussion imply for the analyst in the clinical situation? I suggest that his knowledge of brain function in neuropsychiatric research populations might infuse respect for how the child's difficulties arise through a complex interaction between physical and psychic events. My main point, though, is that nobody knows which of the neurobiological findings are primary to the patient's psychic set-up and which of them are secondary to remote psychological events. If he can acknowledge this complexity, unresolved countertransference fears will interfere less in his decision about psychoanalytic treatment and how to conduct it. He can then go on doing what is his speciality: to analyse the mind of the child. I hope to show with the following example that this can be quite fruitful.

The effects of psychoanalysis

A second vignette

This vignette is taken from 18 months into Anthony's analysis.

On arrival he is cocksure and throws a kiss towards the taxi driver. He marches into the consulting room with his wet boots on, which he declares he is allowed to do.

Resolved to safeguard the analytic frame, I respond no, and he takes off his boots. He initiates a 'fishing contest'. My task is to admire him while he wins. My comments drop dead, but suddenly he asks, worried and earnest, 'Who is afraid of Black Man?'

My countertransference changes swiftly. Bored at admiring his fishing show, I now keenly empathise with his anxiety about Black Man. I ask him about it, but he won't answer. Instead, he becomes a triumphant king. He says I am Black Man, and it occurs to me that I wear black clothes today. But, suddenly he is Black Man and the dialogue gets confused. I comment that, when he is the king, he doesn't seem afraid of Black Man.

He nods and walks to an adjacent little room, where he has a "TV party". Uninvited, I feel deserted as he sings triumphantly. Anthony returns to the fishing game and declares he has won. I renew my efforts at challenging his denial of reality. I respond, 'No, there must be two persons in a game. Otherwise you cannot win. You play on your own'.

He calms down and says, 'Black Man eats flowers'.

His fears are suddenly exposed. He looks anxiously at my flowers at the windowsill, which he played around with yesterday. I feel he fears punishment for his playing with them.

A: Maybe Black Man saw that you played with the flowers yesterday?

P: Yes, you go to jail. The police got to know about it. Shsh, we mustn't talk! Black Man eats you up. I am Black Man.

Black Man eating flowers is obviously a displacement. Yesterday, Anthony played with the flowers. Today's punishment will be that Black Man eats him up. Revolting against this, he tries it the other way around: he is Black Man. I interpret to him that he fears that Black Man saw him play with my flowers and tease the taxi driver. Therefore, he thinks Black Man will eat him.

Now, he becomes self-confident, friendly and curious, and suggests we go to the movies. The film, to which he also invites other guests, is about places related to his prehistory. The session ends and we collect his play material. Putting on his boots and jacket, he says with a warm smile, 'Bye bye, Black King'. I reply, 'Yes, that is how things become if you blend the king with Black Man'.

Analysis yields that Anthony's initial impulsivity is linked to his aggressive fantasies and yesterday memories, which make him fear revenge. The ego cannot regulate his impulses and affects. His fishing and party games are excited but not joyful, since the ego cannot initiate thought processes necessary for the creation of pleasant games. The ego disturbance is also evident in his fragmented communication. He communicates not so much to make me understand, but to affect me; 'Admire me! Be my subject!' He deals with his impotence by projective identification, which results in my feeling confused and excluded. When the projective identifications fail to deliver him from his panic, the bizarre Black Man object appears. It is created out of his anger and his fear of my, and the taxi driver's, wrath. Black Man also contains elements of a grotesque superego, which threaten him with prison or of being devoured.

As the Black Man object is contained in the analytic situation, Anthony is able to transform it into the Black King. This alpha element, or symbol, expresses a new solution to oedipal power regulation. We have often talked about who is prince and who is king.

The Black King symbol unites his love obvious in his smile, with his hate against my 'royal' power. His cheerful attitude when he leaves me indicates his budding conviction that guilt can be handled. It is possible to be angry with someone you love, have gruesome fantasies, express them in words and go on thinking about and enjoying life.

Anthony finished analysis after almost four years as a quite joyful and self-confident boy. His sense of time is precise and his memory enviable. He uses a varied language, rich in references to places and world events. He expresses emotions instead of defecating rowdy thoughts. Now, he has 'fantasies; they are thoughts you just have! You can think them yourself, and you can be alone with them'. He still has a tendency to omnipotence, which probably hindered analysis from being conducted to levels necessary to enable him to meet depressive pain steadfastly. As for neuropsychiatric symptoms, only dyslexia is evident in the analytic situation. Obviously, I cannot judge to what extent it is due to cerebral dysfunction, or to his rejection of the boring job implied in joining letters into words. He still goes to a small-sized school class, but hopes to enter an ordinary class in the future.

One can ask to what extent treatment outcome was due to life events, to a positive surrounding, to a general maturation—and to psychoanalysis. The support from devoted parents and a well-functioning neuropsychiatric rehabilitation team was crucial. However, I maintain that his development would have been impossible without psychoanalysis. The amelioration of his thought processes, his language, his affect control and his mood were consequent upon thorough analytic work with the specific topics I have described.

Psychoanalysis is an often-neglected treatment method for children with neuropsychiatric disorders. I hope to have shown, by providing a clinical example and a psychoanalytical model, that it deserves to be brought out as one of several treatment methods for these children. By bringing out the complexity of the issues on aetiology in these disorders, and delimiting psychoanalysis as a method of investigating the child's experiences, I have emphasized the need of an open door: in the psychoanalytic situation, one that opens up to the child's inner world; in the interscientific dialogue, one that opens up between the disciplines that approach the riddles of these disorders.

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Translations of summary

Psychoanalytische Überlegungen zu neuropsychiatrischen Störungen im Kindesalter. Der Beitrag untersucht Probleme an der Schnittstelle von Neuropsychiatrie und Psychoanalyse. Der Autor plädiert für die psychoanalytische Behandlung von Kindern mit ADHS (Aufmerksamkeits-Hyperaktivitätsstörung) und DAMP (Dysfunktion in attention and activity control, motility control and perception). Er führt die geringe Zahl von Behandlungsempfehlungen durch Neuropsychiater darauf zurück, daß Psychoanalytiker ihr spezifisches Forschungsfeld nicht immer klar darlegen. Dies könnte die wissenschaftliche Community zu der Annahme veranlassen, daß die Psychoanalyse sich zu Fragen äußern wolle, die nicht in ihr eigentliches Forschungsfeld fallen, zum Beispiel zur neurobiologischen Ätiologie. Infolgedessen nimmt die Community die spezifische Aufgabe des Psychoanalytikers nicht mehr wahr, die darin besteht, dem Kind zu helfen, sein bewußtes und unbewußtes Erleben auszudrücken und durcharbeiten. Eindeutige Stellungnahmen zur Funktion des Analytikers würden deshalb die Beziehungen zur wissenschaftlichen Community verbessern und einen Vergleich der Behandlungsmethoden erleichtern. Die Gegenübertragung ist in der Arbeit mit neuropsychiatrischen Kindern häufig mühsam zu handhaben. Die Vielzahl an Therapeuten und Theorien, die das Kind umgeben, kommen erschwerend hinzu. Wenn sich der Analytiker über eine

Aufgabe im klaren ist, bereitet ihm die Gegenübertragung weniger Schwierigkeiten. Wenn er simplizistische ätiologische Formulierungen durchschaut und ihre Komplexität versteht, wird dies sogar noch einfacher. Die Psychoanalyse kann eine bemerkenswerte intellektuelle und emotionale Entwicklung einleiten, wie die Arbeit mit einem Jungen, der in der Latenzphase behandelt wurde und unter DAMP, Autismus und leichter mentaler Retardierung litt, zeigt. In seinem psychoanalytischen theoretischen Bezugsrahmen verbindet der Autor ich-psychologische Formulierungen mit Bions Verständnis der Denkstörungen.

Algunas visiones psicoanalíticas sobre los desórdenes neuropsiquiátricos en niños. El autor aborda temas colindantes con la neuropsiquiatría y el psicoanálisis. El autor recomienda el tratamiento psicoanalítico a niños con TDAH (trastorno de déficit de atención e hiperactividad) [ADHD, en inglés] y DACMP (déficit de atención, control motor y percepción) [DAMP, en inglés]. Asimismo atribuye el bajo nivel de recomendación del psicoanálisis como tratamiento neuropsiquiátrico en parte a que los psicoanalistas no siempre declaran su campo específico de investigación. Es posible que por ello la comunidad científica asume que el psicoanálisis pretende comentar temas ajenos a su propio campo, como la etiología neurobiológica, y no logra discernir las tareas específicas del psicoanalista, que es ayudar al niño a expresar y elaborar sus experiencias conscientes e inconscientes. Una claridad de parte del analista mejoraría las relaciones con la comunidad científica y facilitaría una comparación relevante de métodos de tratamiento. La contratransferencia en el trabajo con niños neuropsiquiátricos suele ser difícil de manejar. A menudo esta situación se ve agravada por la cantidad de terapeutas y teorías que rodean al niño. Si el analista tiene en claro su tarea, la contratransferencia se vuelve más fácil de manejar. Si detrás de las formulaciones simplistas sobre etiología comprende su complejidad, se vuelve aún más manejable. El autor ilustra mediante el trabajo con un niño en latencia con DAMP, autismo y ligero retardo mental cómo el psicoanálisis puede producir un desarrollo intelectual y emocional considerable. En el marco teórico psicoanalítico del caso, el autor reúne formulaciones de la psicología del yo con conceptualizaciones bionianas sobre las perturbaciones del pensamiento.

Points de vue psychanalytiques sur les troubles neuropsychiatriques de l'enfant. Le présent article examine certains aspects de l'interface entre neuropsychiatrie et psychanalyse. L'auteur préconise le traitement psychanalytique pour des enfants présentant des syndromes ADHD (trouble : déficit attentionnel et hyperactivité) et DAMP (dysfonctionnement de l'attention et du contrôle des activités, de la motricité et de la perception). Il considère que le traitement analytique occupe une place modeste dans les recommandations thérapeutiques concernant ces troubles à cause du fait que les psychanalystes ne revendiquent pas toujours la spécificité de leur champ d'investigation. Ceci conduirait la communauté scientifique à croire que la psychanalyse a tendance à produire de commentaires en dehors de son propre champ d'investigation, par exemple sur l'étiologie neurobiologique. Par conséquent, la communauté scientifique ne parvient plus à repérer la tâche spécifique de la psychanalyse, qui est d'aider l'enfant à exprimer et à élaborer ses expériences conscientes et inconscientes. Davantage de clarté concernant le rôle de l'analyste pourrait améliorer les relations avec la communauté scientifique et faciliter la mise en place de comparaisons pertinentes des méthodes thérapeutiques. Le contre-transfert est souvent encombrant lorsqu'on travaille avec des enfants atteints de troubles neuropsychiatriques. Souvent le problème est aggravé par la pléthore de théories et de thérapeutes qui entourent l'enfant. Si l'analyste est clair par rapport à sa tâche, le contre-transfert devient plus facile à manier. S'il va au-delà des formulations simplistes sur l'étiologie et comprend sa complexité, le contre-transfert devient encore plus malléable. La psychanalyse peut conduire à un développement intellectuel et émotionnel considérable, comme le montre le travail avec un garçon en période de latence, présentant un DAMP avec autisme et léger retard mental. En présentant le cadre théorique psychanalytique de ce cas clinique, l'auteur réunit des formulations issues de la psychologie du moi à une conceptualisation bionienne du trouble de la pensée.

Alcune opinioni psicoanalitiche sui disturbi neuropsichiatrici infantili. Quest'articolo tratta di questioni che collegano neuropsichiatria e psicoanalisi. L'autore raccomanda il trattamento psicoanalitico per bambini con ADHD (deficit dell'attenzione, disturbi di iperattività) e DAMP (disfunzioni nell'attenzione e nel controllo dell'attività, nel controllo della motilità e nella percezione). Egli attribuisce in parte la scarsa attenzione dedicata a questi disturbi nel corso del trattamento neuropsichiatrico al fatto che non sempre gli psicoanalisti dichiarano quale sia il loro campo d'indagine specifico. Ciò potrebbe indurre la comunità scientifica a supporre che la psicoanalisi aspiri a intervenire su argomenti estranei al proprio campo d'indagine, come per esempio l'eziologia neurobiologica. La comunità non riesce quindi a discernere il compito specifico della psicoanalisi, che è quello di aiutare i bambini a esprimersi e a rielaborare le loro esperienze conscie e inconscie. La chiarezza da parte dello psicoanalista migliorerà così i rapporti con la comunità scientifica e faciliterà un utile confronto tra i metodi di trattamento. Il controtransfert è spesso

d'impaccio quando si lavora con bambini neuropsichiatrici. Le numerose figure terapeutiche e le molte teorie attorno al bambino spesso aggravano la situazione. Se lo psicoanalista è chiaro sul suo compito, il controtransfert diventa più facile da gestire. Se egli vede più in là delle formulazioni semplicistiche sull'eziologia e ne comprende la complessità, il controtransfert diventa ancor più gestibile. La psicoanalisi può sfociare in un notevole sviluppo intellettuale ed emotivo, come è illustrato dal lavoro con un ragazzo nel periodo di latenza affetto da DAMPS, autismo e lieve ritardo mentale. All'interno di questa cornice psicoanalitica teorica, l'autore unisce le formulazioni della psicologia dell'io a una concettualizzazione di stampo bioniano del disturbo del pensiero.

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