MATERIALS

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History of autism from a fairy tale and legends after genetic research – laboratory of building scientific myths

Abstract

Autism is one of the most mysterious human disorders ever known. Although existent from the dawn of humanity, it was only in 1943 that science took up this subject. Before, undiscovered and unnamed, it was considered merely a legend, and the only existing records were those of few pioneer case studies.

Leo Kanner, the first person to properly define autism, with his discoveries marked the beginning of a struggle to describe the disorder using scientific jargon. Unfortunately, the trials were not always successful. Autism, as described by contemporary science, is a neurodevelopmental disorder. Theories claiming its psychogenic aetiology can no longer be sustained.

The history of research concerning autism points to a phenomenon known as collective thinking – a term coined by Ludwik Fleck, as well as to the process of the emergence of a scientific myth. It is a study of how researchers' presuppositions can shape social beliefs and at the same time how constructing scientific theories is inherently ingrained in the cognitive style of an era.

Second half of the 20th century marks the beginning of a gradual change in the classification of autism. The perception of the nature of this disorder shifted from psychogenic theories to organic aetiologies.

It is the voice of the enormously talented and creative individuals with high-functioning autism that triggered a breakthrough in the research – the voice that was discarded until the 1980s.

Keywords: autism history, leo kanner, autism causes, psychoanalysis, neurodevelopmental disorder, collective thinking, louis fleck, scientific myth, classification dsm, high-functioning autism

Foreword

In 1943, the American medical journal *The Nervous Child* published the article of the paediatrician Leo Kanner entitled "Autistic Disturbances of Affective Contact". The 33-page long study of 11 cases of children triggered a growing interest of the ac-

ademic world in the – previously ignored by it – unusual developmental disorders in children¹.

Since then, the concepts on the nature and aetiology of autism have substantially evolved, but the study of the Austrian paediatrician continues to be of critical importance for child psychiatry and is quoted in almost all publications on this topic².

L. Kanner claimed that the disorders in the children he studied were "innate", however, because he dedicated a lot of attention to describing parents, whom he presented as "intellectuals, cold and stiff", psychoanalysts quickly established a link between the parents' character and autism³. Although there were no proofs for such interdependence, the same belief was shared by virtually all professionals. Entire generations of parents fell victim to psychoanalytical indoctrination, convinced that they were the cause of their children's disorders⁴. However, psychogenic theories on the aetiology of autism were not substantiated by empirical research. They only exposed both autistic children and their parents – the scapegoats of the situation – to unnecessary confusion and great suffering. Therapy based on psychodynamic assumptions proved to be a complete failure⁵.

It was only the third classification, the *DSM-III* of 1980, that defined autism as a pervasive developmental disorder, formally distinguishing autistic children from psychotic or schizophrenic ones⁶. The latest classification – the *DSM-V* – has replaced the term *pervasive developmental disorders* with *autism spectrum disorders* (ASD), which are understood as early emerging neurodevelopmental disorders⁷.

Why then the speculative theories that left no chance for any effective therapy existed and were cultivated in academic circles for several decades? Why was L Kanner's pioneer paper read selectively, disregarding the facts suggesting the organic origin of disorders.

The history of autism shows how strongly the science is embedded in the context and style of thinking of the time and how much its work is exposed to mythologisation.

The purpose of the article is to present the history of autistic research, psychosocial processes that Ludwik Fleck termed as collective thinking and the construction of the scientific myth on the causes of autism that specialists used to strongly believe in.

In order to achieve the purpose, the article will go back to sources older than L. Kanner's work that contain traces of autism and then investigate the context in which the paediatrician conducted his study and what happened to his work later on. However,

⁵ Ibidem, p. 27.

⁶ GAŁKOWSKI, T., Usprawnienie dziecka autystycznego w rodzinie, Warszawa 1980, p. 7.

⁷ MORRISON, J., DSM-5 bez tajemnic. Praktyczny Przewodnik dla klinicystów, Kraków 2016, p. 40.

¹ BRAUNER, A. and F., Dziecko zagubione w rzeczywistości: historia autyzmu od czasów baśni o wróżkach. Fikcja literacka i rzeczywistość kliniczna, Warszawa 1988, p. 11.

² Ibidem, p. 197.

³ Ibidem, p. 218.

⁴ BOBKOWICZ-LEWARTOWSKA, L., *Autyzm dziecięcy – zagadnienia diagnozy i terapii*, Kraków 2000, p. 11.

the focal point will be an analysis of the construction of the theory of psychogenic aetiology of autism, in particular the concept of the psychiatrist Bruno Bettelheim.

Subsequently – in order to visualise the erroneousness of the psychoanalytical approach – the article will outline the most important issues associated with neurodevelopmental disorders underlining autism.

As the understanding of the causes of autism developed, its classification changed and also it was gradually demythologised. The author believes that the final proof of the falsity of any theories on the psychogenic nature of the disorder is the voice of persons with high-functioning autism that concludes the analysis of the history of autism.

1. The depths of time before Kanner

In 1969, at the 1st Congress of the National Society for Autistic Children in San Francisco, L. Kanner said: "I have not discovered autism. It existed before. I did not even have to do much to find it"⁸. Since it existed before, it must have left some traces, if not in academic research then in literature, culture, tales. And this indeed is the case. Descriptions of children behaving in a "bizarre" way that could not be explained by deafness, limited mental abilities or any known disease exist in legends, fairy tales and historical accounts dating back to the Antiquity. Of course, it may not be stated with certainty that these descriptions correspond to any of the complex neurodevelopmental disorders that are now – according to DSM-V – classified as *autism spectrum disorders*⁹. However, certain types of behaviour typical of autism recorded in those accounts, e.g. specific speech disorders, suggest that they indeed describe children with autistic type of disorders.

Searching for traces of autism from before its "disclosure" by Kanner was the focus of Alfred and Françoise Brauner. They described many of their findings in the book: *L'Enfant déréel : histoire des autismes depuis les contes de fées. Fictions littéraires et réalités cliniques* (The Child Lost in Reality: History of Autism since Fairy Tales. Literary Fiction and Clinical Reality). Their work was first published in France at a time when the terms *autism* and *child psychosis* were still used interchangeably¹⁰.

According to the researchers into the history of autism, the first mention of a person with autism spectrum disorders was recorded by Herodotus, the Greek historian of the 5th century BCE. He says that the Lydian King Croesus had two sons. The older, Atys, was **far more intelligent** than any of his peers. The younger son, whose name remains unknown to us, was deaf-mute, although "well built in every respect"¹¹. According to the prophecy of the Oracle of Delphi, the man would speak out on the day of doom.

- ⁹ MORRISON, J., op. cit., p. 40.
- ¹⁰ GAŁKOWSKI, T., op. cit., p. 7.
- ¹¹ BRAUNER, A. and F., op. cit., p. 65.

⁸ Leo Kanner, speech, meeting of the American Associations for Autistic Children, [quoted after:] BRAUNER A. and F., op. cit., p. 2.

"Man do not kill Croesus!" – was the first and only word spoken by him, at the moment when a Persian soldier approached to kill the king on the day of the fall of his state.

A. and F. Brauner believe that the unexpected utterance reminded of the "vocal outburst" typical of certain autistic persons – sudden ability to speak caused by strong emotions. Also, the man described by Herodotus cannot have been deaf, if he said the sentence. It is unlikely that the Greek historian made a mistake in his account – contemporary science highlights the importance of distinguishing between child muteness caused by deafness and autism¹². It is also recognised now that there may be a correlation between the genes of neurodevelopmental disorders and the genes of special talents and high intelligence ¹³ that was also attributed to Atys, Croesus' older son.

The spontaneous utterance reminding of the autistic "vocal outburst" and the aboveaverage intelligent brother are not enough to diagnose autism in Croesus' son, however, a detailed analysis of the language used by Herodotus to describe him suggests that he was not simply deaf or developmentally disabled.

According to researchers¹⁴, Croesus's son was the first recorded, but certainly not the first in history, child with autistic spectrum disorders.

When looking for traces of autism in the Middle Ages,

it is hard to find descriptions of children diverging from mental standards, as they were simply considered to be developmentally disabled and in most cases did not survive. Besides, the involvement of a daemon in this kind of births was only too evident to waste one's time on trying to understand their nature¹⁵.

The learned ones: theologians, philosophers, lawyers shared the same common opinion in this respect. An interesting story was recorded by Martin Luther early into the Renaissance period:

Eight years ago, when I was in Dessau whom I saw and grappled with a child haunted by evil spirits. He had the use of his eyes and all his senses, so that one might think he was a normal child. But he did nothing but gorge himself as much as four peasants or threshers. When they tried to put him to bed, he started screaming. He laughed at rejoiced at every misfortune that happened in the house. However, if things went well, he was tearful and deeply sad.

So I said to the Prince of Anhalt: "If I were the Prince, I should take the child to the Moldau River which flows near Dessau and drown him." I also advised the people of the country to order the Lord's Prayer to be said in church and pray that the dear Lord take the Devil away. This was done daily in Dessau and the changeling died in the following year. In my opinion, such children are nothing but a bulk of meat without the soul [emphasis by K.O.]¹⁶

¹² PIETRAS, T., WITUSIK, A., *Autyzm – pozycja nozologiczna, charakterystyka kliniczna i diagnoza*, [in:] *Autyzm – epidemiologia, diagnoza i terapia*, ed. T. PIETRAS, A. WITUSIK, P. GAŁECKI, Wrocław 2010, p. 16-20.

¹³ GRANDIN, T., Myślenie obrazami oraz inne relacje z życia z autyzmem, Warszawa 2006, p. 226.

¹⁴ BRAUNER, A. and F., op. cit., p. 66.

¹⁵ Ibidem, p. 61.

¹⁶ Quoted after: BRAUNER, A. and F., op. cit., p. 66.

The first scientific description of a boy known by the initials W.H., who behaved in a very similar way, comes from 250 years later. Its author, the British physician John Haslam, no longer believed in a Devil inside the child, but admitted to be completely helpless in the face of his condition. He recorded the case in the voluminous book entitled *Observations on Madness and Melancholy: Including Practical Remarks on Those Diseases* published in 1809. He could not have known at that time that it was the first scientific description of autism spectrum disorders¹⁷. The child's behaviour reflected all the four diagnostic criteria of autism according to the contemporary *DSM-V* classification:

(1) Persistent deficits in using communication and interaction for social purposes.

- (2) Restricted, repetitive patterns of behaviour and interests.
- (3) Symptoms must be present in the early development period.
- (4) Symptoms cause significant impairment in current functioning.

It is worth noting that in 1962, the American psychiatrist G. E. Vailant, identified as many as 17 similarities between W.H. and the child profile presented by L. Kanner in 1943.

Probably the better known "Victor the wild boy of Aveyron", found in 1800, when he was about 12 years old, also suffered from autism spectrum disorders. He was described by the French physician and educator Jean Marc Itard. At first, researchers thought that his dramatic condition was due to lack of socialisation and expected his development to progress fast, however, even despite the high pedagogic skills, knowledge and intuition of the young physician (he was only 26 when he adopted the boy), J. Itard did not achieve the predicted results¹⁸.

Victor of Aveyron was not only a child deprived of upbringing and social life, which was reflected in his limited ability to adapt, as Rousseau's students would put it, but he was also a deeply disordered creature in terms of his mental life – this is the reasons of Itard's failure, according to A. and F. Brauner.¹⁹

In the early 19th century, physicians recorded a few more cases of children with similar disorders. In 1803, the British physician J. Haslam described a 9-year old boy whose behaviour was "definitely maniacal" and who was very aggressive. Although his intellectual level was moderate, he was aware of his condition: "God has not made me the same as other children" – he said²⁰. It seems that the boy examined by J. Haslam may have suffered from what used to be defined as *overactive disorder associated with mental retardation and stereotyped movements* (F84.4 in *ICD-10*), which reminds of ADHD and intellectual disability combined²¹, according to the contemporary DSM-V criteria²².

²¹ PIETRAS, T., WITUSIK, A., op. cit., p. 19.

¹⁷ BRAUNER, A. and F., op. cit., p. 73.

¹⁸ Ibidem, p. 95.

¹⁹ Ibidem, p. 94.

²⁰ Ibidem, p. 84-85.

²² Morrison, J., op. cit., p. 34,49.

At the end of his life J. Itard, having examined in 1838 a boy named Adrien H. recommended to his parents the young and energetic Edward Séguin – one of the most extinguished French educators²³. In a letter to the boy's father, E. Séguin writes:

His body is constantly in convulsions. Adrien does not speak. There is virtually no reaction from Adrien to anything that is asked of him, he never performs two subsequent orders (...) His intelligence is already well developed, but he does not use it in the right way. To sum up, he can do a number of things, he can think and talk, however, on the condition that someone else wants it for him²⁴.

The description does not make it clear whether Adrien indeed was autistic, but certainly his condition could not be defined as "mere intelligence deficiencies" – according to A. and F. Brauner, the enthusiasts of E. Séguin²⁵.

After he had moved to the USA and obtained the PhD degree in medicine, E. Séguin described extensively the case of Emma N., listing all the characteristic features of autism. The description was published in the book *On Idiocy* in mid-19th century. It is worth noting that for E. Séguin, the word *idiot* has its original Greek meaning: *idios* in Greek means one who *stands apart, is isolated, peculiar*²⁶.

The research and therapeutic work of J. Haslam, J. Itard and E. Séguin in the 19th century represent growing academic interest in infantile developmental disorders. However, this was only the beginning of transformations in this area. The casting out of daemons and removal of curses was still more common than the efforts of physicians and educators.

Apparently, in those days, even courts would accept the argument that parents who caused the death of their child as a result of such practices had good intentions and would acquit them of them of infanticide. One of such court verdicts of 1826 was recorded by T. C. Croker:

The defendant explained that it was not her who had killed the child, but the child's grandmother. It was determined that the child, at the age of four, could not walk or talk. Following the advice and instructions of the grandmother, the child was immersed in a river for three subsequent days. The third immersion was too long and turned out to be fatal²⁷.

The intention of the extremely radical measures was usually to drive a daemon out of a child, but the above court verdict concerns a much more complicated case: it involved so-called "Good People" – the mysterious nation of sorcerers and fairies who were supposed to inhabit Ireland. According to tales, those fairies could not feed their own chil-

²³ BRAUNER, A. and F., op. cit., p. 108.

²⁴ Ibidem, p. 108-109.

²⁵ Ibidem.

²⁶ Ibidem, p. 110.

²⁷ CROKER, T. C., *Fairy Legends and Traditions of the South of Ireland*, 1826, quoted after: BRAUNER, A. and F., op. cit., p. 28.

dren, so they would sometimes come to people's homes and, when nobody saw them, took babies from cradles and left their own children there. The fairy's child was enchanted to look exactly like the "swapped" one, so that the mother at first did not see any difference. However, those children behaved strange and, as a rule, could not speak, so as not to give away their secret²⁸.

The fairy tales knew how to unmask the intruder, but recovering one's own child was more difficult. The swapped child had to be taken by surprise or scared into laughter or speaking. Once unmasked, the monster had to be tortured, thrown into a river, left to freeze, put into a furnace or burnt in fire. Wise people knew methods that never failed. In fairy tales there was always a chance that the "Good People" would turn up in the spur of the moment and give back the real child²⁹.

A. and F. Brauner believe that this type of accounts contain descriptions of symptoms typical of autism spectrum disorders.

The moment of swapping children reminds of developmental regression that happens in appr. 25-30% autistic children at some point during the first three years of life. It may be abrupt or gradual, adding to previous subtle developmental delays or an atypical course of child development. An observable change in behaviour affects the speech, gestures, so-cial behaviour and the way a child plays. The mechanisms underlying the phenomenon remain unknown to us³⁰.

Making children laugh or speak by magical means reminds of communication disorders typical of autistic children: imitative, grammatically incorrect and not relevant to the situation, which was reported already by L. Kanner³¹ and H. Asperger³².

The mysterious *fada*³³ child can be found in Scandinavian, Old English, Scottish, German, French and Slavic fairy tales. Having discovered a similar motif in one of Chinese tales, researchers have concluded that the phenomenon is not unique for the European culture only³⁴.

Such sources used to be common knowledge at that time. It is worth noting that in these accounts, parents blindly accept all the charlatanic advice and do not hesitate to take even the most radical steps³⁵. Researchers studying the history of autism discovered offi-

²⁹ Ibidem, p. 28.

³⁰ SKÓRCZYŃSKA, M., Wczesne diagnozowanie autyzmu – perspektywy i dylematy, [in:], Autyzm – na granicy zrozumienia, ed. B. WINCZURA, Kraków 2009.

³¹ GAŁKOWSKI, T., op. cit., p. 13.

³² SZYDZIAK, M., Ewolucja poglądów na przyczyny autyzmu, [in:] Dziecko z autyzmem: rozważania teoretyczne, doniesienia z badań, ed. D. MARZEC, A. BANASIAK, Częstochowa 2005.

³³ *Fada* – means providing someone with magical properties. Etymologically, the term derives from the word "fata", a form of "fatum" (predestination) and has no association with the Latin word "fatuus" – stupid.

³⁴ BRAUNER, A. and F., op. cit., p. 35.

³⁵ Ibidem, p. 28.

²⁸ BRAUNER, A. and F., op. cit., p. 20.

cial documents³⁶ that suggest that as late as in 1851, in Ireland there were still cases of parents intentionally causing the death of their child as a result of the cruelty of folk healers and charlatans who claimed to know how to remove spells from children.

The situation continued into late 19th century, when researchers started describing and naming early developmental disorders with their own terminology. A lot of time had passed since then before autism was defined as such. This does not mean, however, that it did not exist. Neither did it go unnoticed by the literature of the 19th century. William Wordsworth, Walter Scott, Joseph Conrad – those British writers were the first to introduce children with disorders to world literature³⁷.

Writers have always been ahead of the science, trying to imagine what the science has not yet defined. In some respect, artists were very far ahead of the science, seeing the suffering and futile efforts of the families of those children:

Eve gathered all her strength to recover her child from nonexistence³⁸.

2. The road to discovering Kanner

L. Kanner's pioneer article "Autistic Disturbances of Affective Contact" was published in 1943 in the context of a growing scientific interest in early developmental disorders in the 20th century.

The Italian physician Sante de Sanctis described in 1905 a condition that he named "the earliest dementia" after the term *dementia praecox* proposed by the German psychiatrist Emil Kraepelin. In 1911, *dementia praceox* was replaced with *schizophrenia*, the term introduced into psychiatry by the Swiss Eugen Bleuler³⁹.

The Viennese educator and therapist Theodor Heller described in great detail 6 cases of "very peculiar dementia" that differed significantly from typical low intelligence and showed symptoms similar to autism, and – what is important – appeared suddenly between 2 and 3 years of age, after a period of quite normal development. The German psychiatrist Wilhelm Weygandt defined the cases described by Heller as *dementia infantilis*, but finally the term *infantile schizophrenia* came into use.

In 1931, Corbert performed the first biopsy in four children with symptoms of the disorder and found certain organic damages in the central nervous system. However, his research did not arouse much interest – for psychiatrists, schizophrenia was in nature a functional disorder, without any elements of organic aetiology⁴⁰.

³⁶ Official report by Sir William Wilde for the year 1851, quoted in the book by Kevin Danaher *The Year in Ireland*.

³⁷ BRAUNER, A. and F., op. cit., p. 135.

³⁸ Loyré d'Arbouville, *Doktor Barnaba*, 1847, quoted after: BRAUNER, A. and F., op. cit., p. 152.

³⁹ BRAUNER, A. and F., op. cit., p. 192.

⁴⁰ Ibidem, p. 193.

The book by Heinrich Hanselmann of the Zurich University entitled *Introduction to Therapeutic Pedagogics* published in 1935 contains the first reliable, scientific description of children considered psychotic in the intellectual standard. The Swiss educator writes about children "devoid of emotions" (*gefühlsstumpf*) or, in other words, "emotional idiots" (*gefühlsblöd*), although it is hard to associate those persons with autism spectrum disorders – despite terminological semblance, they significantly differ from the characteristics presented at a later date by L. Kanner and H. Asperger:

They are considered to be egoists without any limits, devoid of a heart or emotions. They are unlike anything else in this world. (...) Nothing is sacred for these children, they are not afraid of anything, because they do not love anything, and the only thing they are interested in is their own Me. (...) Emotionally, they are empty, not attached to any thing or person⁴¹.

The above deliberations illustrate the scientific context at the time of publication of two papers crucial for the history of autism, each from the opposite front of the global conflict in "those countries, where famine and war were not the dominant misfortunes"⁴².

Twenty years after emigrating to the USA, in 1943, the Austrian paediatrician Leo Kanner used in his article the word *autism* to describe 11 cases. One year later, a similar description was presented in Germany by another Austrian researcher Hans Asperger in his article "Autistic Psychopathy in Childhood". Their concepts were not identical and the cases described by them differed in the intensity of disorders. Subsequent events left Asperger in shade and a lot of time had passed before the two descriptions were connected by the term *autism spectrum*⁴³.

The two papers were casuistic and very thorough but, as Tadeusz Gałkowski notes, they contained numerous subjective and imprecise interpretations of the analysed behaviour⁴⁴. L. Kanner started his research in 1938 at the Psychiatry Clinic of Johns Hopkins University. Five years later, he published his observations in *The Nervous Child* journal⁴⁵. His paper was reprinted in the international journal *Acta Paedopsychiatrica*⁴⁶. The term "innate autistic disturbances of affective contact" made its way to specialist terminology⁴⁷.

Although the concepts on the nature and aetiology of autism have significantly evolved since the times of L. Kanner, his work triggered regular research into autism and is quoted in almost all publications discussing this topic⁴⁸.

- 44 GAŁKOWSKI, T., op. cit., p. 14.
- ⁴⁵ 1943, vol. 2 no. 3.
- 46 1968, vol. 35, no. 4-8, p. 198-136.
- 47 GAŁKOWSKI, T., op. cit., p. 14.
- ⁴⁸ BRAUNER, A. and F., op. cit., p. 197.

⁴¹ Quoted after: BRAUNER, A. and F., op. cit., p. 194.

⁴² Ibidem, p. 198.

⁴³ Ibidem, p. 196.

3. Kanner's description and its importance

Of the 11 children described by L. Kanner, 8 were boys and the other 3 were girls, and they were all under 11 years of age. Each case was unique, but the researcher observed certain similarities that formed the syndrome:

Since 1938, there have come to our attention a number of children whose condition differs so markedly and uniquely from anything reported so far, that each case merits – and, I hope, will eventually receive – a detailed consideration of its fascinating peculiarities⁴⁹.

It is not the purpose of this article to summarise all the 11 cases (they can be found in A. and F. Brauner's book, p. 196-212). What is important are those elements of L. Kanner's report that became the point of reference for subsequent concepts of the aetiology of autism and a source of controversy.

At first, it should be noted that the very first description presented by L. Kanner contains behavioural symptoms that are typical of all the cases and fall under two pivotal features. Those were:

Autistic aloneness – the inability to relate to people and fondness of objects manifested by lack of emotional contacts with the closest relatives, and speech disorders and irrelevance of spoken reactions to situations;

Desire of sameness – stereotypies caused by obsessive fear manifested by excessive focus on objects and manipulating them, and repeating the same motions and behaviours multiple times⁵⁰.

Contemporary diagnostic criteria also distinguish two pivotal symptoms. These are socio-communicative deficits and persistent interests and repetitive behaviours⁵¹. The definitions are the same as the characteristics presented by the Austrian paediatrician, so T. Gałkowski is right to claim that "the symptoms listed by L. Kanner have become the classical set of the features of infantile autism"⁵².

The main symptom in the diagnosed children was – according L. Kanner – their "inability from the earliest childhood to make contacts with others normally, in everyday situations". These children – as their parents claimed – were "self-sufficient" and "the happiest when left alone", and "behaved as if there were no people around them".

Three of these children did not speak. The other 8 did not use speech to communicate – they could name objects and remember difficult terms and expressions, although

⁴⁹ L. Kanner 1943, quoted after: BRAUNER, A. and F., op. cit., p. 198.

⁵⁰ BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 12.

⁵¹ The literature from before the latest version of the *DSM-V* classification defines three, rather than two, pivotal symptoms of autism: (1) qualitative impairment in social interaction, (2) qualitative impairment in communication, (3) restricted repetitive and stereotyped patterns of activities [see PIETRAS, T., WITUSIK, A., op. cit., p. 19]. *DSM-V* combined two groups into one domain: social-communication deficits. These changes – important from the perspective of diagnostics – do not mean that the issues discussed in this article have become outdated.

⁵² GAŁKOWSKI, T., op. cit., p. 14.

they were not able to form sentences that would "convey meaningful thoughts, desires or questions"⁵³.

Kanner stressed the fact that the children were intellectually quite competent, but problems with making permanent contacts made it impossible to verify the level of their intelligence with standard tests⁵⁴. Moreover, "all of them had an intelligent physiognomy".

The paediatrician determined that the disorders he described were "innate", although T. Gałkowski claims that he used the term "not being quite certain as to their actual origin"⁵⁵.

The children described by L. Kanner came from intellectual families of high social and cultural status – "among their relatives and grandparents were numerous physicians, researchers, writers, journalists and artists" T. Gałkowski writes:

They spent a lot of time working and did not create a warm atmosphere for their children, which is necessary for normal emotional development. Thus, children grew up **in an emotionally cold environment** [emphasis by K.O.], where more attention was paid to attractive values associated with the art, science and work than to human contacts⁵⁶.

L. Kanner made a distinction between the cases described by him and infantile schizophrenia. Infantile schizophrenia is preceded by at least two years of normal development, whereas the children described by Kanner showed developmental abnormalities already in the first months of their life.

L. Kanner's work gained much recognition and his research was continued and expanded. In 1971, in Washington was launched the quarterly *Journal of Autism and Childhood Schizophrenia*" dedicated "solely to infantile psychosis and autism"⁵⁷.

L. Kanner's work drew the attention of researchers to earlier descriptions that in many respects were very similar. These were, for example, the studies of J. Haslam of 1809, Meyer and Richards of 1921, L. Desperta of 1938 and Witmer of 1920⁵⁸.

L. Kanner devoted much attention to the parents of the children analysed by him, and psychoanalysts concluded on this basis that there existed a relationship between the character of parents and autism. The same belief was shared by virtually all professionals. Lucyna Bobkowicz-Lewartowska stresses that entire generations of parents fell victim to psychoanalytical indoctrination, convinced that they were the cause of their children's disorders⁵⁹. The major catastrophe in autism research happened after researchers had taken the effort of finally defining the condition.

⁵³ Ibidem.

⁵⁴ Ibidem, p. 15.

⁵⁵ Ibidem, p. 14.

⁵⁶ Ibidem, p. 15.

⁵⁷ Ibidem.

⁵⁸ Ibidem, p. 17-18.

⁵⁹ BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 20.

However, it was not – as is often thought – what L. Kanner believed himself⁵⁰. As a paediatrician, he associated the inability to make affective contact with neurobiological functioning:

Thus, it should be concluded that the children have come into the world with **innate inability** [emphasis by K.O.] to form usual, biologically provided affective contact with people, just as other children come into the world with innate physical or intellectual handicaps... – writes Leo Kanner in his article of 1943⁶¹.

L. Kanner description of parents as "intellectuals, cold and stiff" lead psychoanalysts into the conclusion that parents were "guilty" of the developmental disorders in their children, with all the consequences thereof⁶².

I especially acquit you people as parents. I have been misquoted many times [emphasis by K.O.] I used a word that is not equivocal – "innate" but because I described some of the characteristics of the parents as persons, I was misquoted often as having said that: "it's all the parents' fault" [emphasis by K.O.] Those of you who have come here with your children to see me know very well that I have never said anything like it. In fact, I tried to reassure parents worried by this kind of speculations

– said Leo Kanner during the 1st Congress of the National Society for Autistic Children in San Francisco on 17 July 1969⁶³.

4. Psychoanalytical theories on the causes of autism

Leo Kanner realised the fact that the word *autism* was not quite fortunate. He wrote about it in his article "Infantile autism and the schizophrenias", but he did not know a better term⁶⁴. The word "autism" was first used by Eugene Bleuer in 1911 to describe one of the main symptoms of schizophrenia – a peculiar separation from the surrounding world⁶⁵. The use of the term was inopportune for a number of reasons. First of all, it suggested that the syndrome described by L. Kanner was a form of schizoid psychopathy, as a result of which the two distinct disorders were mistakenly associated with one another. Secondly, the term "autism" functioned in different theoretical approaches. For example, Mahler

- ⁶³ KANNER, L. [quoted after] BRAUNER, A. and F., op. cit., p. 218.
- ⁶⁴ BRAUNER, A. and F., op. cit., p. 197.

⁶⁵ WINCZURA, B., Zaburzenia ze spektrum autystycznego: różnicowanie diagnostyczne, [in:] Pedagogika specjalna – koncepcje i rzeczywistość, Vol. 6, Wyzwania współczesnej pedagogiki specjalnej – praktyka edukacyjna i rewalidacyjna, ed. T. ŻÓŁKOWSKA, B. OSTAPIUK, M. WLAZŁO, Szczecin 2000, p. 61.

⁶⁰ TALAROWSKA, M. et al., *Badanie psychologiczne w autyzmie*, [in:] *Autyzm – epidemiologia, diagnoza i terapia*, ed. T. PIETRAS, A. WITUSIK, P. GAŁECKI, Wrocław 2000, p. 101.

⁶¹ KANNER, L. [quoted after] BRAUNER, A. and F., op. cit., p. 218.

⁶² BRAUNER, A. and F., op. cit., p. 218.

called the first stage of mental development to be the autism phase. In Piaget's theory, autism was the initial phase of development. The term is also used in adjective phrases, such as autistic behaviour or autistic reaction⁶⁶.

It was probably L. Kanner's work, with its characteristics of the parents of autistic children, that influenced the first psychoanalytical search for the causes of autism. It is worth quoting here the table developed by M. K. DeMeyer presenting the opinions of authors who, on the basis of L. Kanner's work, looked for the causes of autism under this particular scientific paradigm (table 1).

Bettelheim (1958)	The parents' rejection and anger
Des Lauriers (1962)	A psychoanalytical theory of the "ego". Inability to make a contact with the reality.
Pavenstedt (1955)	The mother's psychotic bond with her child.
Knight (1963)	Inability to establish a verbal primacy in a child that causes the development of cogni- tive functions to shift from exteroceptive to interoceptive "ego".
Sznurek (1956)	Personality disorders in both parents. Child's reactions are an augmentation of their disorders.
Clerk (1961)	Problems with communication between the mother and the child. The child shows strong fear caused by the mother's aggressive behaviour.
Ferster (1961)	The parents strengthen pathological symptoms in the child.

Table 1. Theories on the psychogenic origin of infantile autism

Source: DeMeyer, 1977, quoted after: GAŁKOWSKI, T., op. cit., p. 29.

M. K. DeMeyer also enumerated the researchers whose understanding of the causes of autism covers both functional and organic factors (table 2).

In the 1950s and 1960s were developed the first theories on the organic origin of autism, concerning in particular such factors as damage of the reticular formation (Rimland, 1960), excess oxygen in the body (hyperoxia), impaired cortical blocking and stimulation - according to Pavlov's concept (Macmillan 1961) or problems with controlling the time of reaction on the perceptive and motoric level due to neurological factors (Fish, 1960). However, psychodynamics remained the dominant trend in the search for the causes of autism and it had a major impact on the attitudes and beliefs of subsequent researchers, therapists and relatives of autistic persons⁶⁷.

One of the most influential researchers to postulate that the causes of autism were of psychogenic and environmental nature was Bruno Bettelheim⁶⁸. The same as many other writers, he claimed that parents and their method of raising a child played the decisive role

⁶⁶ Ibidem, p. 61-62.

⁶⁷ GAŁKOWSKI, T., op. cit., p. 30-31.

⁶⁸ Ibidem, p. 34.

Anthony (1958)	The environment and organic factors cause psychotic disorders in the child.
Eisenberg and Kanner (1956)	Innate causes and personal experiences are combined.
Garcia and Sarvis (1964)	Pathological reactions develop between the 6 th and 18 th months as a result of com- plex psychological and physical stimuli.
Goldfab (1961)	Describes "organic" and non-organic cases. Children of the first type have more balanced families.
Rank (1955)	Hereditary and biological factors, and "as if" mothers.
Mahler (1955)	An infant has a constitutional defect of the "ego", which may create a "vicious circle" in the mother's pathological bond with the child.
Bene (1958)	The mothers of children with strong autistic disorders are less capable of form- ing social contacts or emotional bonds than those whose children have milder disorders.

Table 2. Theories on combined organic and psychogenic origin of infantile autism.

Source: DeMeyer, 1977, quoted after: GAŁKOWSKI, T., op. cit., p. 30.

in the aetiology of the disorders, being a major pathogenic factor. This opinion was very consequential for therapeutic practice.

B. Bettelheim defined autism as the child's reaction to a hostile environment that caused his suffering. The child, not trusting the surrounding reality, suppressed any desires to interact with the environment, this way avoiding the risk of mental injuries. Lack of trust to the reality causes withdrawal, even though the same reality could satisfy the child's needs. Thus, autism becomes the last fortress, where the child may take refuge from suffering⁶⁹.

The psychiatrist used in his theory the concept of critical milestones in the development of a child. If, during one of the critical periods, the child receives information that the world is dangerous and does not satisfy his needs, and all it has to offer is frustration, then the child may "become convinced" that the world is not worth his trust, and that it cannot be relied on and should be avoided. This insensible world not necessarily means lack of proper physical care, but rather it is insensitive to the child's mental needs, its natural need to form mental contacts.

The empty fortress metaphor – although criticised by authors more inclined to look for organic reasons of autism – proved to be fascinating for many researchers and gained many supporters⁷⁰.

B. Bettelheim and his followers represented quite a peculiar type of psychoanalytical approach using the concepts of philosophy, sociology and other human sciences.

⁶⁹ Ibidem, p. 21.

⁷⁰ Ibidem

Bettelheim thus explains the causes of behaviour of an autistic child through the paradigm adopted by him:

To begin to function then, as human beings, one must have learned how to arrange one's own life in terms of time, space and causality. These categories of mind are not just metaphysical; there is a definite historical-genetic sequence in which they appear. Orientation in time and space precedes a sense of causality. (...) But in a world where no causality exists, no prediction is possible nor any planned action. If we cannot anticipate what the results of our actions will be, we are not in control of our fate. Then only two possible courses of action make sense: either to do nothing, since that at least saves us energy and disappointment; or to create a fantasy world in which we can imagine we are still in control of our fate.

When developing his concept of the causes of infantile autism, B. Bettelheim drew on his experience from concentration camps. The psychiatrist had been deported to Dachau in 1939, and later moved to Buchenwald⁷¹. There, he witnessed pathological reactions of fellow prisoners to repressions: suicidal attempts, catatonic symptoms⁷², melancholic depression and other types of behaviour typical of the serious mental disease called schizophrenia. The reason for these pathological behaviours – different because of different personalities of individual prisoners – was "life on the verge". According to B. Bettelheim:

what was external reality for the prisoner is for the autistic child his inner reality⁷³.

For these reasons, B. Bettelheim postulated special institutions for the children or psychotherapy for their parents⁷⁴.

Apart from B. Bettelheim, other researchers also explained autism by psychoanalytical terms. Melanie Klein, in her theory on impaired separation-individualisation process defines autistic behaviours as schizoid adaptation – the result of improper and "cold" attitude of caregivers, especially the mother⁷⁵. Margaret Mahler presented a complex theory of the aetiology of autism as the effect of the loss or withdrawal of cathexis from the human aspect of the representation of an object and maintaining a relation with an inanimate and mechanic object⁷⁶. Frances Tustin explained the cause of autism through premature loss of a symbiotic bond with the mother. Niko Tinbergen, on the other hand, suggested that typical autistic behaviour may be the reaction to strong fear a child feels if he is not safe in his relationship with the mother.

⁷¹ GAŁKOWSKI, T., op. cit., p. 22.

⁷² Catatonia – one of schizophrenic psychoses characterised by strong psychomotor agitation (excitation or catatonic rage), or slowing down until complete immobility (stupefaction or catatonic stupor), and the condition may oscillate between the two extremes (*Slownik psychologii*, ed. J. SIUTA, Kraków 2005, p. 120).

⁷³ GAŁKOWSKI, T., op. cit, p. 22.

⁷⁴ BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 27.

⁷⁵ Ibidem.

⁷⁶ GAŁKOWSKI, T., op. cit., p. 22.

5. Critique of the concept of the psychogenic aetiology of autism

Psychogenic theories on the aetiology of autism were not substantiated by empirical research⁷⁷. They only exposed both autistic children and their parents – the scapegoats of the situation – to unnecessary confusion and great suffering. Therapy based on psychodynamic assumptions proved to be a complete failure⁷⁸.

One of the first researchers who dared to negate the stereotype was Carl Delacato. According to him, the cause of unusual behaviour in children could be brain damage. He writes:

These children were not psychotic. They were brain-injured and had serious sensory problems. (...) These children were not autistic for psychological reasons, but behaved in a way that suggested neurological causes of the condition⁷⁹.

Even though the therapeutic method developed by C. Delacato is strongly debated these days, the observations he had made strongly influenced the interpretation of numerous behaviours if autistic children.

Psychoanalysis went one step further, suggesting that improper interaction during breastfeeding causes autism⁸⁰.

In time, especially in Salem, the diagnosis that someone was a witch was based on increasingly fancy evidence. Having a look at nipples was enough. (...)

And now, although we use much more subtle terms, do we not still use the same horrific concepts to accuse mothers of bringing the strange creatures to us?

I could not agree with the theory of "coldness" and "giving the breast". They lead nowhere. Those women were turned into scapegoats⁸¹

Commenting on the numerous theories on the psychogenic aetiology of autism, T. Gałkowski writes:

It seems that such **careless accusing of parents** [emphasis by K. O.] for one of the most serious developmental abnormalities does not help future upbringing of the child in the family and in itself has the potential of causing strong emotional conflicts in them. It is a situation, where a specialist's attempt to explain the cause of the condition may itself cause another condition (jatrogenic effect)

- comments T. Gałkowski on B. Bettelheim's concepts.

A Brauner., a strong opponent of B. Bettelheim, in a book summarising his 20 years of experience working with autistic children, writes:

⁷⁷ BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 27.

⁷⁸ Ibidem.

⁷⁹ DELACATO, C. H., Dziwne, niepojęte: autystyczne dziecko, Warszawa 1995, p. 41.

⁸⁰ Ibidem.

⁸¹ Ibidem, p. 41-45.

After twenty years spent in this profession, I try to count how many mothers of mentally nonadapted children were indeed "rejective", and although there have been hundreds of them in my institution, the latter were fewer than the fingers on one hand (...) In contemporary psychology, there is a strong tendency to explain the causative background of the condition called "infantile psychosis" through the mother's rejection of her child. It is believed that the mother's unwillingness, from the moment of birth or even somewhat earlier, to give love to her child makes the child mentally ill. The mother's unintended "guilt" is only a working hypothesis that, whether true or false, **has already caused huge damage** [emphasis by K.O.] from the moment it was formulated and became an idea proclaimed in a superficial and simplified way⁸².

The already quoted C. Delacato comments the consequences of the psychoanalytical trend using even harsher words:

In 1971, doctor L. Kanner presented the results of catamnestic research on eleven children, which he described in his first article on autism. At that time, therapy was rarely used, so many of them were sent to institutions. Kanner believed that placing a child in an institution resulted in his complete withdrawal from any contacts with the environment. Catamnestic research proved that over the last thirty years, no major progress had been achieved in treatment, nor an effective therapy had been developed⁸³.

The question is now why the psychoanalytic trend became dominant in interpreting the causes of autism. How did it happen that hypothetical concepts not grounded in science became widely popular among researchers, physicians, practitioners and finally – parents themselves⁸⁴? In order to answer the question, we should go back to the first and fundamental for further research into autism article L. Kanner published in 1943.

Two issues ought to be discussed here: **socioeconomic status of the parents**, who represented the intellectual class⁸⁵ and their **attitude towards children**, which L. Kanner described as "cold and stiff"⁸⁶.

T. Gałkowski reports that, according to the research conducted by Lorna Wing in Middlesex, England in 1964, "autism occurred more often in highly industrialised areas" and "in families of a higher socio-cultural status"⁸⁷. However, he observes that:

*Intelligent parents of a higher socio-cultural and economic standard could afford consulting specialists without delay and were more likely to notice any disorders in their children.*⁸⁸

- 83 DELACATO, C. H., Op. cit., p. 154.
- ⁸⁴ BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 27.
- 85 BRAUNER, A. and F., op. cit., p. 212.

86 Ibidem, p. 218.

87 GAŁKOWSKI, T., op. cit., p. 12.

⁸² BRAUNER, A., *Les enfant des confins*, Paris, 1976, p. 38-39; [quoted after] GAŁKOWSKI, T., op. cit., p. 34.

⁸⁸ Ibidem, p. 18.

A meta-analysis of the studies on the socioeconomic status of parents performed by E. Schopler (1979) revealed that those relationships were artefacts – the researcher and his team identified a number of reasons that could cause the overrepresentation of autistic children in high-status families, the most important of them being **better access to infor-mation and diagnostic centres** and **more financial possibilities**⁸⁹.

The other issue – the attitude of the parents of the 11 children described by L. Kanner - can also be explained not by the pathogenic personality of the parents but rather by the situation in which they found themselves.

To better visualise the argument, it is worth quoting a few descriptions of how the parents functioned. One of the fathers "worked as a lawyer and was constantly overworked"⁹⁰, the other "was absorbed in his work and did not enjoy the company of other people", a certain mother "saw pathology everywhere and was constantly busy working"⁹¹.

Many of the parents' behaviours and attitudes described by Kanner may be explained not by personality disorders or lack of proper parental attitude but rather by the **burntout syndrome**, to which the parents of autistic persons are highly exposed⁹². Currently, the phenomenon is much better known and described than it was at the time, when Kanner published his pioneering work. It is worth noting that at that time, there were practically no real forms of support for the families of children with developmental disorders and, significantly, autism was entirely obscure not only for the family but also for specialists and researchers.

"Their fate is a life in constant stress and isolation and most of the time waiting in vain for help, but help does not come" – T. Gałkowski wrote about the situation of the families of autistic children in 1980^{93} . Thus, the psychical condition of families that several dozen years earlier visited L. Kanner should be no surprise.

6. Neurodevelopmental knowledge of the causes of autism

The results of research conducted over the last 20 years suggest that there may be about 6 genes constituting the major risk factor of autism and 20-30 more genes that affect the intensity of the disorder. These are the genes that control the development and functioning of the nervous system.

In view of contemporary medical research, autism is a neurodevelopmental disorder that develops as a result of a compilation of a strongly hereditary polygenic genetic predisposition and environmental risk factors, especially teratogens. This is also the definition

⁸⁹ BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 17.

⁹⁰ BRAUNER, A. and F., op. cit., p. 202.

⁹¹ Ibidem, p. 201.

⁹² GAŁKOWSKI, T., Dziecko autystyczne w środowisku rodzinnym i szkolnym, Warszawa 1995, p. 80-81; BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 28-29.

⁹³ GAŁKOWSKI, T., Usprawnienie dziecka autystycznego w rodzinie, p. 35.

adopted by the current *DSM-V* classification⁹⁴. Numerous findings in the area of genetics and developmental neuropsychology – although not entirely coherent – render invalid the psychogenic theories of the aetiology of autism that existed for many years⁹⁵.

As Temple Grandin⁹⁶ observed, it is probable that the genes of neurodevelopmental disorders are correlated with the genes of special talents and above-average intelligence. T. Grandin describes cases of very talented members of the families of children with autism spectrum disorders. This throws some light on the history of King Croesus's children mentioned earlier in the article. Also – as has already been stated – families of a higher socioeconomic status have more information and better possibilities to have their children properly and without delay diagnosed and treated⁹⁷. This is contrary to the concept that "cold and stiff parents" are "guilty" of disorders in the development of their child. As T. Grandin writes in her memoirs⁹⁸, she too was sent to psychoanalytical therapy on the grounds of her supposed conflicts with parents, which – as one may easily imagine – did not yield any results. Parents supported here and were sensitive to her needs, which excludes emotional and social deprivation as possible aetiology⁹⁹.

A major increase in the frequency of diagnosing autism resulted in attempts to explain the phenomenon by **environmental factors**, such as growing environmental pollution, antibiotics or vaccines. In fact, most of them have not been confirmed yet. The increase in the frequency of diagnosing autism is probably due only to the changes in nosological classification, which causes only an apparent increase in real incidence.

However, it is not unlikely that the pathogenesis of autism includes not only genetic but also other factors¹⁰⁰. It is likely that in about 50% children, the development, apart from genetic and metabolic factors, was also affected by prenatal viral infections, poisoning, perinatal injuries, hypoxia or over-oxidation in incubators. Such hypotheses make it possible to focus further research into the aetiology of autism on more specific areas¹⁰¹.

Obviously, the abovementioned factors are only risk factors. No research determines the sufficient and necessary conditions for the development of autistic disorders due to the fact that autism – as a neurodevelopmental disorder – develops according to the two principles of neurodevelopment: **multifinality** (divergence) and **equifinality** (convergence)¹⁰². This means that there may be any behavioural pictures of autism caused by similar config-

95 BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 38.

- 97 BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 17.
- 98 GRANDIN, T., op. cit., p. 186.
- 99 MORRISON, J., op. cit., p. 46.

¹⁰⁰ GRUNA-OŻAROWSKA, A., *Umysł niewspółodczuwający – neurobiologia autyzmu*, [in:] *Autyzm – na granicy zrozumienia*, ed. B. WINCZURA, Kraków, 2009, p. 9.

¹⁰¹ MARKIEWICZ, K., *Możliwości komunikacyjne dzieci autystycznych*, Lublin 2004, p. 23.

¹⁰² BOBKOWICZ-LEWARTOWSKA, L., op. cit., p. 38-39.

⁹⁴ MORRISON, J., op. cit., p. 40.

⁹⁶ GRANDIN, T., op. cit., p. 226.

urations of risk factors. At the same time, similar behavioural pictures of the disorder may emerge from different developmental paths.

Each of the pivotal symptoms of autism may be associated with biochemical and anatomic background, and specific disorders in brain activity. Many of them can be located in specific areas of the brain¹⁰³.

It should be made clear here that not all autistic persons have the same biological dysfunctions. Substantial data on that issue have been gathered over many years of research. This knowledge is very valuable, as it helps better understand the "mechanisms of autism" and reject the concepts of its psychogenic aetiology¹⁰⁴.

7. The impact of psychoanalytical theories

It was only the third classification, the DSM-III of 1980, that defined autism as a pervasive developmental disorder, formally distinguishing autistic children from psychotic or schizophrenic ones¹⁰⁵.

Entire generations of physicians and other specialists were educated in the psychoanalytical trend, and the consequences for the families of artistic children were devastating.

Research conducted in 1996 by Peter Randall and his team: *Review of the satisfied and unsatisfied needs in the families of autistic children* reveals the deep trace left in the parents' consciousness by psychoanalytical indoctrination. This is reflected by what the parents suspect may be the causes of disorders in their children:

- 32% of parents suggest a traumatic experience in early childhood;
- 24% think the reason are mistakes they made in raising their children;
- 28% suspect that complications during pregnancy or delivery may be the cause;
- 8% indicate genetic factors;
- 12% say "I don't know".

Also, the attitude of relatives towards the child was alarming. According to the research conducted by Randall and his team, relative often express weird or even absurd opinions and 30% of them put the blame on the parents. A similar percentage of relatives accuses parents of neglecting their child¹⁰⁶.

In Poland, Katarzyna Markiewicz¹⁰⁷ conducted in 2004 a survey among psychology students concerning their knowledge of the causes of autism. 34% of respondents suggested lack of parents' love, especially mother's love, as the cause of developmental disorders in children. 32.8% suggested personality disorders in parents and 16.4% – wrong attitude to raising the child. Although the survey covered a small group of students, the re-

¹⁰³ WÓJCIK, R., PORZYCKA, A., WITUSIK, A., PIETRAS, T., op. cit., p. 31 – 31.

¹⁰⁴ Ibidem.

¹⁰⁵ GAŁKOWSKI, T., Usprawnienie dziecka autystycznego w rodzinie, p. 7.

¹⁰⁶ RANDAL, P., and PARKER, J., Autyzm: jak pomóc rodzinie, Gdańsk 2004, p. 97.

¹⁰⁷ MARKIEWICZ, K., op. cit., p. 57.

sults are not optimistic – they show how deeply rooted is the **scientific myth** of autism as infantile psychosis.

False knowledge generated the stereotype of a psychotic child wobbling in the corner of a room for lack of parents' love. The stereotype resonates to this day. It is the effect of the laborious effort of many researchers who, in their compact collective thinking, created an exemplary scientific myth.

8. Collective thinking and scientific myth

L. Kanner's work did not develop in an intellectual void – it appeared in a specific scientific context and atmosphere created by the specialists of human psychology and behaviour. The recipients and first interpreters of his work were – as Ludwik Fleck would put it – a certain **collective mind** equipped with a specific, historically conditioned **style of thinking**¹⁰⁸.

Although the collective mind consists of individuals, it is not a simple sum. An individual is never – or almost never – aware of the collective style of thinking, which, however, almost always entirely affects the individual's thinking so that the individual is unable to think anything to the contrary¹⁰⁹.

In the context of the intensive development of psychoanalysis in mid-20th century, it was almost impossible to establish a different, commonly accepted concept of the aetiology of a disorder that **resembled schizophrenia** (although L. Kanner, from the very beginning of his work, distinguished the disorder analysed by him from schizophrenia). According to L. Fleck, observations depend on the thinking style of the collective mind, making thinking a social activity¹¹⁰. The system of beliefs of a community opposes anything that contradicts it and it is not only passive opposition but also active reacting. L. Fleck writes:

What is not consistent with the system either goes unnoticed or is ignored (...) or a huge effort is taken to prove that the exception does not contradict the system. Despite reason and contrary opinions, things are seen, described and even presented in a way **that reflects the prevailing thinking** [emphasis by K.O.], so they as if fulfil this thinking¹¹¹.

L. Kanner's description, if it was to be noticed, had to be interpreted in the psychoanalytical context, and any other suggestions, e.g. brain micro-injuries, were opposed by scientific circles, as C. Delacato wrote:

¹⁰⁸ FLECK, L., *Powstanie i rozwój faktu naukowego*, Lublin 1986, p. 68.

¹⁰⁹ Ibidem, p. 70.

¹¹⁰ Ibidem, p. 130.

¹¹¹ Ibidem, p. 56.

A great idea, perhaps a new way to help children, excitement about the discovery! I should have been thrilled but was not (...) The idea was so much different. It went too far away from what had been assumed before. It would put out of balance all those who all their life had looked at those children from a psychological perspective, instead of noticing their perceptive and neurological problems¹¹².

It seems that psychoanalytical theories on the aetiology of autism grew to the rank of a scientific myth. A myth – apart from numerous other functions – provides "non-empirical realities", as Jaromir Jeszke puts it¹¹³. A myth grounded in science "by satisfying needs that are impossible to satisfy in any other way" facilitates the socially imposed task to seek the truth about the world, i.e. to satisfy cognitive needs. However, that truth is always distorted. It is one of the possible reasons why scientific circles accept a concept that is not proven by empirical research¹¹⁴.

Another possible reason for the establishment of those opinions may the authority of their authors. "The society tends to accept, more or less uncritically, certain scientific opinions only because they were expressed by educated persons" – notes Luc Bürgin¹¹⁵. He adds that "professional duels between authorities are usually fought behind closed doors and the common people know nothing about them. It has always been like that and, as a result, the society and, for lack of external critique – also quite often researchers – identify scientific models with a precise reflection of the reality"¹¹⁶. The situation does not stimulate scientific development and may also be the cause of a false social image of the world.

According to the definition provided by Jerzy Topolski, a scientific myth is understood as "a type of conviction that withstands or is not subjected to validation and endures in the researchers' consciousness of or in their texts"¹¹⁷.

Leszek Kołakowski warns that "a myth may grow like nervous tissue and replace positive knowledge and the law, and may try to take by force all areas of culture, and accumulate terror, despotism, lies"¹¹⁸. There is no reason to assume that the words of the famous philosopher may not apply to the history of science¹¹⁹. Thus, they may also apply to the history of social research and autistic research, which is a part of the former.

The relationship between the myth and the science seems paradoxical: what is mythical is positioned outside the science, concerns non-scientific knowledge, is susceptible to cultural influence. The science is believed to have always been independent of such influ-

¹¹⁷ JESZKE, J., op. cit., p. 12.

¹¹² DELACATO, C. H., op. cit., p. 68-69.

¹¹³ JESZKE, J., Mity polskiej historiografii nauki, Warszawa 2007, p. 9.

¹¹⁴ Ibidem, p. 11.

¹¹⁵ BÜRGIN, L., Blędy nauki. Zapomniani geniusze – ich droga przez mękę, Warszawa 1998, p. 7.

¹¹⁶ Ibidem.

¹¹⁸ KOŁAKOWSKI, L., Obecność mitu, Wrocław 1994, p. 48-49.

¹¹⁹ JESZKE, J., op. cit., p. 19.

ences. Because the two ways of perceiving the reality are so radically different, historians for a long time did not accept the existence of the "myth" in such a "noble" area of culture as the science¹²⁰.

However – as Alina Motycka openly states – "the myth satisfies a certain type of human needs that the science is incapable of satisfying, so its presence in the culture is indispensable, and the scientistic vision of full demythologisation of the science – utopian"¹²¹.

Stanisław Anderski¹²² – although he does not use the term "myth" – colourfully presents the mechanism of its development in social sciences by comparing researchers of human behaviour to sorcerers:

Because his [the researcher's] theories are often hard to verify, people want him to say exactly what they want to hear (...). Why would he resist threats and temptations, if it is so difficult to prove anything in his area, whereas fulfilling one's desires, playing with human emotions and even conscious lies evade punishment? However, his dilemma is there, because it is so hard to turn back: having passed a certain limit, it is hard to admit to having wasted years on chasing phantoms or to having profited from human naivety. In order to silence one's doubts, anxieties and feeling of guilt, one takes the path of least resistance and endlessly expands the network of fiction or lies [emphasis by K. O.], at the same time insisting more and more strongly that one desires to be objective and search for the truth.¹²³

The origin, development and expansion as well as strong resistance against changing the theory of the psychogenic aetiology of autism have all the features of a mythologised creation of a very specific and narrow collective thinking, as T. Gałkowski emphatically puts it:

In this general trend to blame parents is manifested not the psychoanalytical approach, but rather it is **quite a characteristic social phenomenon** caused by the current state of knowledge in this area. Specialists try in vain to explain what remains inexplicable and create a **pseudo-scientific circle of "great sorcerers". Nobody cares to verify the hypothesis and its supporters put on the red robes of prosecutors** [emphasis by K.O.]¹²⁴.

9. Voice from within – revelation of high-functioning autism

A great chance for changing the perception of autism may be the voice of high-functioning persons with autism. One of the world's best known among them is T. Grandin – doctor of animal science, professor at Colorado State University. Her book *Thinking in Pictures* was published in 1986 as the first account on autism "from within". Oliver Sacks

¹²⁰ Ibidem, p. 20.

¹²¹ MOTYCKA, A., Rozum i intuicja w nauce, Warszawa 2005, p. 148-149.

¹²² ANDERS, S., Czarnoksięstwo w naukach społecznych, Warszawa 2002, p. 33.

¹²³ Ibidem.

¹²⁴ GAŁKOWSKI, T., Usprawnienie dziecka autystycznego, p. 35.

writes in a foreword to this unusual publication: "the book is quite extraordinary, unprecedented and, in a way, unthinkable"¹²⁵. His opinion is by no means exaggerated, because at that time, it was believed that autistic persons had no "inside", and even if they had, there was no way of reaching it. "Temple Grandin's voice came from a place which had never had a voice, never been granted real existence before". T. Grandin speaks not only in her own name but also on behalf of thousands of other exceptionally talented autistic persons. "It was indeed a revelation" – writes Sacks.

T. Grandin is not an exception. It is worth mentioning here the Australian born Dona Williams, who achieved a place at a university at a time when the concept of autism was virtually unknown. In her autobiographic book *Nobody Nowhere* translated into 14 languages, she describes her struggle in having to constantly confront their own perception of the world with social misunderstanding:

I had given a girl from university a lift home. As we drove past the special school I had been to as a small child I pointed out that I had gone there.

"You couldn't have," she said. "That's a special school."

"what do you mean?" I asked her.

"It's a school for special-needs children," she explained. "My mother works there as a speech therapist."

"It must have changed," I said naively.

"No, it's always been a special school," she said. "You can ask my mother."

Bryn and I lay stretched on the grass. I had told him what this girl had said.

"I went to a special school, too," Bryn confined. "I had been sent away because my parents thought I was mad."

He told me how he spent time in the "home" and that he had had trouble communicating with people. His parents had thought that he may have been schizophrenic¹²⁶.

The German writer and filmmaker Axel Brauns, drawing on his childhood and youth memories, presents the unique way of seeing, understanding and behaving of an autistic person in his book *Coloured Shadows and Bats. Living in Another World:*

Some autistic persons live in silence, enclosed in themselves, others go wild because the reality overwhelms them. (...) Some autistic persons laugh and talk a lot, others are more sober and taciturn. Some autistic persons despair because of their depressive thoughts, others live on the bright side of life¹²⁷.

Obviously, not every autistic child is a hidden genius. Research shows that a vast majority of autistic persons are also intellectually disabled, and some of them never learn to speak verbally. The exact rate of these disorders is hard to determine – some research suggests that it may be, respectively, 75% (intellectual disability) and 50% (lack of verbal

¹²⁵ GRANDIN, T., op. cit., p. 11.

¹²⁶ WILLIAMS, D., Nikt nigdzie – niezwykła autobiografia autystycznej dziewczyny, Warszawa 2005, p. 109.

¹²⁷ BRAUNS, A., Barwne Cienie i nietoperze. Życie w autystycznym świecie, Poznań 2009, p. 19.

speech)¹²⁸ of autistic persons. More recent statistical data – based on research conducted in Poland – suggest that only half (47%) of persons with diagnosed autism are also diagnosed as intellectually disabled¹²⁹. In the literature on the subject, there are also research results concerning the ability to speak that suggest, for example, that only 1/3 of autistic persons do not learn the verbal language¹³⁰.

The data may change because autism is diagnosed at an increasingly early age – even in very young children from the risk group. Thanks to early communication therapy, children develop quite well mentally and the risk of intellectual disability decreases¹³¹.

This means that a vast majority of autistic persons – especially young children – have a high chance to learn verbal speech and develop intellectually. T. Grandin writes that at the age of 6, she could not speak ad her behaviour was deeply dysfunctional. At least one in 10 children may be high-functioning¹³², and the example of T. Grandin shows that it is impossible to tell who is the one in ten – not necessarily that who seems to be so at a given moment¹³³.

Specialists must remember about this and, apart from thorough knowledge of cognitive deficits in autistic persons, they should also have the special ability to hear their voice, the voice that, unlike what was for many years believed – really exists:

I get satisfaction out of seeing stuff that makes real change in the real world – we need a lot more of that and a lot less abstract stuff¹³⁴.

Bibliography

ANDERS S., Czarnoksięstwo w naukach społecznych, Warszawa 2002.

- BANASIAK, M., WITUSIK, A., PIETRAS, T., GÓRSKI, P., Epidemiologia autyzmu, [in:] T. PIETRAS, A. WITUSIK, P. GAŁECKI (ed.), Autyzm – epidemiologia, diagnoza i terapia, Wydawnictwo Continuo, Wrocław 2010.
- BOBKOWICZ-LEWARTOWSKA L., Autyzm dziecięcy zagadnienia diagnozy i terapii, Kraków 2000.
- BRAUNER A. and F., Dziecko zagubione w rzeczywistości: historia autyzmu od czasów baśni o wróżkach. Fikcja literacka i rzeczywistość kliniczna, Warszawa 1988.

¹²⁸ PIETRAS, T., WITUSIK, A., op. cit., p. 20.

¹²⁹ Ogólnopolski Spis Autyzmu Sytuacja młodzieży i dorosłych z autyzmem w Polsce, ed. M. PŁATOS, Warszawa 2016, p. 77.

¹³⁰ KACZMAREK, B., *Nie jak, ale dlaczego? O własnym języku dzieci z autyzmem*, [in:] *Autyzm – na granicy zrozumienia*, ed. B. WINCZURA, Kraków 2009, p. 110.

¹³¹ GROCHOWSKA, J., Wczesne diagnozowanie autyzmu z pomocą kwestionariusza CHAT, [in:] Autyzm wyzwaniem naszych czasów, ed. T. GAŁKOWSKI, J. KOSSEWSKA, Kraków 2001, p. 46.

- ¹³² KACZMAREK, B., op. cit., p. 110.
- ¹³³ GRANDIN, T., op. cit., p. 89.

¹³⁴ (TED2010, Temple Grandin: Światu potrzeba umysłów różnego rodzaju, http://www.ted.com/talks/ lang/pl/temple_grandin_the_world_needs_all_kinds_of_minds.html, [10.11.2012]) BRAUNS A., Barwne Cienie i nietoperze. Życie w autystycznym świecie, Poznań 2009.

BÜRGIN L., Błędy nauki. Zapomniani geniusze – ich droga przez mękę, Warszawa 1998.

DELACATO C. H., Dziwne, niepojęte: autystyczne dziecko, Warszawa 1995.

FLECK L., Powstanie i rozwój faktu naukowego, Lublin 1986.

- GAŁKOWSKI T., Usprawnienie dziecka autystycznego w rodzinie, Warszawa 1980, Polskie Towarzystwo Walki z Kalectwem.
- GAŁKOWSKI T., Dziecko autystyczne w środowisku rodzinnym i szkolnym, Warszawa 1995, Wydawnictwo Szkolne i Pedagogiczne.

GRANDIN T., Myślenie obrazami oraz inne relacje z życia z autyzmem, Warszawa 2006.

GROCHOWSKA J., Wczesne diagnozowanie autyzmu z pomocą kwestionariusza CHAT, [in:] GAŁKOWSKI T., KOSSEWSKA J. (ed.), Autyzm wyzwaniem naszych czasów, Kraków 2001.

GRUNA-OŻAROWSKA A., Umysł niewspółodczuwający – neurobiologia autyzmu, [in:] B. WIN-CZURA (ed.), Autyzm – na granicy zrozumienia, Kraków 2009.

JESZKE J., Mity polskiej historiografii nauki, Warszawa 2007.

KACZMAREK B., Nie jak, ale dlaczego? O własnym języku dzieci z autyzmem, [in:] WINCZURA B. (ed.), Autyzm – na granicy zrozumienia, Kraków 2009.

KOŁAKOWSKI L., Obecność mitu, Wrocław 1994.

MARKIEWICZ K., Możliwości komunikacyjne dzieci autystycznych, Lublin 2004.

MORRISON J., DSM-5 bez tajemnic. Praktyczny Przewodnik dla klinicystów, Kraków 2016.

- MOTYCKA A., Rozum i intuicja w nauce, Warszawa 2005.
- PŁATOS M. (ed.), Ogólnopolski Spis Autyzmu Sytuacja młodzieży i dorosłych z autyzmem w Polsce, Warszawa 2016.
- PIETRAS T., WITUSIK A., Autyzm pozycja nozologiczna, charakterystyka kliniczna i diagnoza, [in:] Autyzm – epidemiologia, diagnoza i terapia, ed. PIETRAS T., WITUSIK A., GAŁECKI P., Wrocław 2010.
- RANDALL P., PARKER J., Autyzm: jak pomóc rodzinie, Gdańsk 2004.
- SKÓRCZYŃSKA M., Wczesne diagnozowanie autyzmu perspektywy i dylematy, [in:], Autyzm na granicy zrozumienia, WINCZURA B. (ed.), Kraków 2009.
- SZYDZIAK M., Ewolucja poglądów na przyczyny autyzmu, [in:] MARZEC D., BANASIAK A. (ed.) Dziecko z autyzmem: rozważania teoretyczne, doniesienia z badań, Częstochowa 2005.

TALAROWSKA M., FLORKOWSKI A., GAŁECKI P., ZBORALSKI K., Badanie psychologiczne w autyzmie, [in:] PIETRAS T., WITUSIK A., GAŁECKI P. (ed.), Autyzm – epidemiologia, diagnoza i terapia, Wrocław 2000.

WILLIAMS D., Nikt nigdzie – niezwykła autobiografia autystycznej dziewczyny, Warszawa 2005.

WINCZURA B., Zaburzenia ze spektrum autystycznego: różnicowanie diagnostyczne, [in:] Pedagogika specjalna – koncepcje i rzeczywistość, T. 6, Wyzwania współczesnej pedagogiki specjalnej – praktyka edukacyjna i rewalidacyjna, ŻÓŁKOWSKA T., OSTAPIUK B., WLAZŁO M. (ed.), Szczecin 2000.

WÓJCIK R., PORZYCKA A., WITUSIK A., PIETRAS T., Neurorozwojowa hipoteza autyzmu, [in:] Autyzm – epidemiologia, diagnoza i terapia, ed. PIETRAS T., WITUSIK A., GAŁECKI P., Wrocław 2010.

TED2010, *Temple Grandin: Światu potrzeba umysłów różnego rodzaju*, http://www.ted.com/talks/ lang/pl/temple_grandin_the_world_needs_all_kinds_of_minds.html, 2012 [10.11.2012].