The History of Ideas on Autism: Legends, Myths and Reality
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The history of ideas on autism

Legends, myths and reality

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ABSTRACT  The development of ideas about the nature of autism is described, covering myths and legends, accounts of individuals in the historical literature, the search for identifiable subgroups, Kanner’s and Asperger syndromes, and the current view of a wide autistic spectrum. Changes in theories of aetiology are outlined, including the early magical and mystical beliefs, the era when purely psychological and emotional causes were promulgated, and the present day research into biological mechanisms. The major advances in understanding the neurological and psychological aspects of autism, which have led to the development of special methods of education, are discussed. The rate of increase in knowledge in recent years gives hope for future progress in understanding and treatment.

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Introduction

As everyone in the field knows, Leo Kanner (1943) was the first person to describe and name a pattern of behaviour he observed in a small group of young children, which he termed ‘early infantile autism’ (derived from the Greek word autos meaning ‘self’). However, Asperger (1944), one year after Kanner’s original paper, wrote about another behaviour pattern in older children and adolescents, which, though different in detail, clearly overlapped with Kanner’s accounts. Asperger also used the term ‘autistic’ in relation to the behaviour he saw.

Legends and history

The history of autistic disorders stretches far back into the mists of time, long before Kanner’s and Asperger’s insights (Brauner and Brauner, 1986). Some versions of the myths of changeling children, left in place of real human babies who had been stolen by fairies, sound remarkably like

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children with autism. The legends concerning the followers of St Francis of Assisi include stories of one Brother Juniper, who was naively innocent and lacking in any social intuition or common sense (Frith, 1989). At the time, his oddity was considered to be due to his saintliness, even though it often exasperated the other brothers. Nowadays he may well have been diagnosed as having Asperger syndrome.

In factual history, scattered examples of individuals who seem to have had autistic disorders can be found. Kanner (1964) quotes Martin Luther’s reported account of a child whose behaviour suggests that he might have been severely autistic (though Kanner did not mention this possibility). Luther recommended that the child be taken to the nearby river and drowned, because he was possessed of the Devil and had no soul. This harsh view, held by a man of the sixteenth century, is in stark contrast to the care and concern shown by J.M.G. Itard (1801/1807), the physician who devised methods of educating Victor, the boy found living wild in the woods of Aveyron in south-central France at the end of the eighteenth century. Itard described Victor’s behaviour in detail (see Lane, 1977). There can be no doubt that Victor was autistic. Itard went on to work with other children who failed to develop speech. He was in the forefront in designing methods to educate those with severe hearing impairments (see Lane, 1977). He was also a pioneer in differentiating mutism due to severe generalized mental retardation from that due to more specific causes. The diagnostic categories used now were unknown in Itard’s time but, among the children he described, there were some who probably had developmental dysphasia and others who would now be recognized as autistic (see Carrey, 1995).

Accounts of persons with one remarkable skill at a much higher level than their other abilities and with very strange behaviour can be found in the past and present literature. Treffert (1989) described a number of such individuals. He noted that, in 1887, Langdon Down, who is most famous for his writings on Down’s syndrome, gave a lecture on individuals with isolated skills, many of whom would now be diagnosed as autistic savants.

Early psychiatric literature

Despite some very vivid descriptions by earlier writers of what we now know to be autistic behaviour (for example, Haslam, 1809), no one saw any connections among the individual cases until the last half of the nineteenth century. Then Henry Maudsley (1867), after whom the Maudsley Hospital was named, suggested that children with very strange behaviour could all be classified as suffering from childhood psychosis.
This was, at first, greeted as a shocking idea because it disturbed the romantic notions about childhood current at the time (at least among the upper middle classes). However, Maudsley’s idea gradually came to be accepted. Psychoses were, at that time, considered to be due to physical causes affecting the brain.

In the first half of the twentieth century, workers in the field of abnormal child development began to try to define subgroups within so-called childhood psychoses. De Sanctis (1906, 1908) and Heller (see Hulse, 1954) described children who seemed to develop normally for a time and then lost language, social and other skills. Margaret Mahler (1952) described children who insisted on clinging to their carers but without any real feeling and who had other abnormalities of behaviour. Potter (1933) wrote about children whom he said had a childhood form of schizophrenia. Earl (1934) described a group of adolescents who were mentally retarded and who developed behaviour that he called catatonic but which had major similarities to severe autistic behaviour.

Leo Kanner and Hans Asperger

Kanner (1943) was one among this group. He wrote his classic description of young children who were socially aloof and indifferent, who were mute or had echolalia and idiosyncratic speech, were intensely resistant to change in their own repetitive routines, and who had isolated skills in visuo-spatial or rote memory tasks against a background of general delay in learning. He emphasized their attractive, alert, intelligent appearance. He considered his form of autism to be unique and different from any other disorder in childhood. Asperger (1944; Frith, 1991) was another of this group of workers. He described older children and adolescents who were naive and inappropriate in social interaction, had good speech but used it for monologues on their own special interests, had poor intonation and body language, were absorbed in their circumscribed interests, and often had poor motor coordination. They were of borderline, normal or superior intelligence but often had specific learning difficulties.

James Anthony (1958a, 1958b), a child psychiatrist, discussed these attempts at defining subgroups. He pointed out that, although there were some differences, all the subgroups that were suggested overlapped with each other to a very great extent. He also noted that there were not enough symptoms to go round among all the authors who wanted to name a syndrome!

It is interesting that, out of all the workers writing in this field, Kanner and Asperger are the only ones whose names have become generally well known throughout the world. Kanner was the first to have his work widely
recognized. Asperger achieved this status in the English language literature much later than Kanner, though his work was known earlier in mainland Europe. In 1962, the Dutch workers Van Krevelen and Kuipers published a paper in English on Asperger syndrome because they considered that Asperger’s ideas were insufficiently known in English speaking countries. Van Krevelen wrote on the syndrome in English again in 1971, but it was not until the 1980s that interest in Asperger’s work began to grow in the UK (Frith, 1991; Tantam, 1991; Wing, 1981).

The reason why Kanner’s and Asperger’s papers continued to capture interest, while other early workers in the field tended to fade into obscurity, is probably because both described the children they saw in such vivid detail. The children come alive from the pages of their papers. Although Kanner and Asperger each thought their syndromes were special and unique, we now know that they overlap with each other and that many children have a mixture of features of both conditions.

The influence of psychoanalysis

The twentieth century gave us the concept of autism and autistic disorders but it also gave a darker twist to the story. The theories of Freud and of other schools of psychoanalysis were developing in Europe during the early years of the century and became strongly influential in the USA during and after the Second World War.

Leo Kanner (1949) suggested that genetic factors played a part in the causation (an insightful guess in the light of recent research). However, he was also influenced by the psychoanalytic theories that had taken such a hold upon the psychiatric profession, especially in the USA. He suggested that the children’s condition was also due to being reared by cold, detached, humourless, rigid parents who were perfectionists, caring for their children like attendants caring for a machine. He noted that almost all the parents he saw had academic qualifications and professional occupations. He thought that the children were potentially normal and of good intelligence but were emotionally damaged. He firmly believed that there was no physical pathology in the brain. Kanner’s ideas about the parents of autistic children were accepted uncritically by many psychiatrists. Professionals in other branches of medicine, nursing and teaching, also adopted these ideas. Even parents themselves were indoctrinated by the prevailing theories.

The results were devastating. Many parents were overwhelmed with guilt and families were split by attempts to assign blame to one or other partner. Some families spent large sums of money on psychoanalytical treatment for their children. If they improved over time, the therapist took
the credit. If there was no change or a deterioration the parents took the blame. The children suffered because they were not given the type of education and help they needed. I have been unable to find any single attempt at scientific evaluation of such treatment in the years when psychoanalytical theories were at their height, up to the end of the 1950s. Nor was there any study of the natural history of autism when no treatment was given, which is an essential basis for evaluation of methods of intervention.

Another thread in the story is the theory that autism is the earliest form of schizophrenia, also once thought to have emotional causes. Kanner at first wrote that autism and schizophrenia were quite separate but, later, he wavered under the influence of child psychiatrist colleagues (Kanner, 1949).

**The re-emergence of theories of physical causes**

Fortunately not everyone had faith in the theory of the emotional causes of autism. Some workers recognized the large overlap with mental retardation (now referred to as ‘learning disability’ in the UK). Some were interested in the abnormalities of language development. Others felt that the neuropathology should be explored.

The champions of the emotional theories had dismissed the possibility of any physical abnormalities in the brain because no specific lesions had then been revealed. Looking back now, it seems remarkably arrogant of anyone to assume that the techniques available in the 1940s and 1950s for examining the brain could never be improved.

It is of interest that, in 1932, Critchley and Earl had described tuberose (or tuberous) sclerosis, a condition in which recognizable brain pathology occurs. The behaviour pattern in this condition is, in a significant proportion of cases, that of typical autism (Hunt and Shepherd, 1993). In the metabolic disorder called phenylketonuria, if it is untreated by a special diet, the behaviour is also like that in autism (Jervis, 1963).

It is curious that Kanner did not mention these neurological conditions that overlap in their behaviour pattern with autism. This may have been because he was convinced of the uniqueness of his syndrome and the high intellectual potential of the children.

**New influences produce new ideas**

The tide began to turn in the 1960s for two main reasons. First, parents who were independently minded enough to reject the idea that they were
to blame for their children’s condition came together to form parents’ associations. The first of these (by a small margin) was the British Society for Autistic Children, now known as The National Autistic Society. Parents in other countries followed suit and now societies are to be found in very many countries throughout the world. Their influence has been of major importance in changing ideas on autism and the needs of the children and their families.

The second factor was the introduction of more rigorous scientific studies. Prior to the 1960s, papers on autism were either clinical case descriptions or what can only be called armchair theorizing. In 1961, Mildred Creak, well known for her interest in autistic disorders, chaired a committee of professionals in the field who produced a set of criteria that defined what they called ‘childhood schizophrenia’ (Creak, 1964). Despite the terminology, it is clear that they were describing disorders we now refer to as autistic. Unfortunately the nine criteria, known as the ‘Nine Points’, were an unsatisfactory mixture of observation and interpretation, which proved hard to apply in practice.

Nevertheless, the work represented the first serious attempt to define a range of disorders including Kanner’s autism. The confusion between autism and schizophrenia occurring in childhood continued to affect the field until, early in the 1970s, Kolvin (1971) and his colleagues carried out a study comparing the two groups of conditions and listed the many differences.

A major contribution to the scientific study of autistic disorders was made by Victor Lotter (1966). He carried out, in the former English county of Middlesex, the first ever epidemiological study of Kanner’s autism. He used as the crucial defining features the two criteria selected by Kanner and Eisenberg (1956) as the most important, that is, social aloofness and indifference to others, and resistance to change in elaborate repetitive routines. He found that nearly 5 in 10,000 children had this syndrome.

Michael Rutter and his colleagues also began their series of studies in typical autism in the 1960s. They described in detail the clinical features, they investigated the children’s profiles on intelligence tests and they followed them up into adolescence and adult life (Rutter, 1970).

Other workers have studied the parents and found no evidence that they caused their children to be autistic through abnormal child-rearing practices (DeMyer, 1975, 1979). Most of the studies that examined the parents’ occupations found that they came from all walks of life (Wing, 1993). Kanner’s theory that the parents were mostly of high social class was not upheld.
The theory of the autistic spectrum

Following Victor Lotter's work, there have been a number of other studies of the prevalence of autism defined in various ways (Wing, 1993). My colleague Judith Gould and I carried out a study in one area of London of children with all kinds of disabilities (Wing and Gould, 1979). We looked for children who had any feature of autistic behaviour, not just those who had typical Kanner's autism. As a result of this, we developed the hypothesis of a wide spectrum of autistic conditions of which Kanner's autism was only one small part. We found a total of 20 per 10,000 children with autistic spectrum disorders combined with mental retardation (IQ below 70). It was during the course of this study that we first saw a few children with the pattern of behaviour described by Hans Asperger. It was a great pleasure to me that I was able to meet Dr Asperger when he visited London, even though we disagreed because he thought his syndrome was separate from Kanner's autism and I thought it was part of the spectrum.

In the 1980s Christopher Gillberg and his colleagues developed and extended work on the autistic spectrum. Gillberg (1992) has hypothesized that there is a range of disorders of empathic understanding of which the autistic spectrum is a part but not the whole. Ehlers and Gillberg (1993) have also studied Asperger syndrome among children in mainstream schools and found a prevalence of at least 36 in 10,000, that is nearly 4 per 1000. They found nearly the same number (35 per 10,000) who would fit into the wider autistic spectrum, including those studied by Sula Wolff. In 1995, Wolff published a book in which she brought together the results of 30 years of research and clinical experience with a group of children and young adults, whom she originally classified as having 'schizoid personality disorder of childhood'. They were characterized by being 'loners' from birth onwards and tended to be egocentric and eccentric in their interests and activities. Most were more able than many people diagnosed as having Asperger syndrome but Sula Wolff, as she explains in her book, considers that they come within the borderlines of the wider autistic spectrum.

The present and the future

The 1990s have brought advances in understanding of the cause and underlying neuropathology of typical autism, although there is still a long way to go. Michael Rutter and his colleagues have shown the importance of genetic factors in autism and probably other autistic spectrum disorders as well (Bolton et al., 1994). There has also been a growth of interest in
the various developmental syndromes in which aspects of autistic behaviour, or even the full picture of typical autism, can occur. From the point of view of the neuropathology, there is growing evidence of possible involvement of parts of the limbic system, the cerebellum and the frontal and temporal cortex in autism. It appears likely that the abnormalities occur at the cellular level and date from very early in development (Bauman and Kemper, 1994).

Psychological aspects of autistic disorders are being examined, including abnormalities of language and communication. Uta Frith and her colleagues have shown the difficulty the children have in understanding other people’s minds (Frith, 1989).

Another advance promises to aid early recognition. Simon Baron-Cohen and his colleagues (1996) have developed a brief screening instrument that appears to be able to identify children who are autistic at the age of 18 months. The basis of the examination is the ability to engage in joint referencing and pretend play.

Parallel with the increasing knowledge of the nature of autistic disorders there has been a steady development of methods of educating (Jordan and Powell, 1995) and caring for people with these conditions (Howlin, 1997a; Wing, 1996).

We have come a long way from the era of myths and legends, through the unhappy deviation into psychoanalysis, to the practical realism of the present day that is accepted by most, though sadly not all, professionals in the field. We now know that there is a wide spectrum of autistic conditions, with Kanner’s and Asperger syndromes each forming only a part of these. The whole spectrum is united by the presence of underlying impairments of three aspects of psychological function, namely, social interaction, communication and imagination. When this ‘triad of impairments’ is present, the individual’s pattern of activities is rigid, narrow and repetitive. The triad can occur alone or in association with any other physical or psychological disorder. Conditions in the spectrum can occur together with any level of ability from profound mental retardation up to superior levels of intelligence. The outcome in adult life is closely related to level of ability in childhood. Only those with average or high intelligence have any prospect of becoming independent in adult life. However, much can be done through education to improve quality of life for all those affected, regardless of ability. Autistic spectrum conditions are developmental disorders caused by physical abnormalities in parts of the brain. Complex genetic factors are important in the causation but there are other physical causes that can lead to autistic conditions. Adding together the prevalence of all autistic disorders in people of all levels of ability, the total is probably around 9 in every 1000.
Despite claims that have been made for a variety of methods, no curative treatment has yet been found that stands up to proper investigation (see Howlin, 1997b). However, we have a great deal of knowledge about methods of education and how to structure the environment and daily programme to increase skills and diminish disabilities and disturbed behaviour.

The hope for the future is that we will identify the precise causes and find effective methods of prevention and treatment of those autistic disorders that are linked with severe disabilities and distress. Where autism is linked to high ability and unusual forms of creativity, the hope is that we will develop our understanding of ways to make life happier for the individuals concerned while valuing and encouraging their special contribution to human life.

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