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Brief Report: Physiognomic Perception in Autism[1]

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INTRODUCTION

Abnormal perception in autism has been noted in some reports on recollection of autistic people (Bemporad, 1979; Volkmar & Cohen, 1985). The characteristics of the perception in autism have been investigated by many researchers. It is now considered one of the basic disturbances of autism not only in the field of psychological but also biological research (Hermelin & O'Connor, 1970; Ornitz & Ritvo, 1968).

We might think the phenomenon of perception as a schema of subject–object relationship, or a sequence of cause and effects. But in reality, we are likely to think that the perception phenomenon is not an objective but an intersubjective one (Merleau-Ponty, 1945). It is why people can perceive something as strange and unusual when there are some changes in their somatic conditions or in their psychosocial environment. For example, we can perceive a thick string as a real snake when we are frightened in the dark. Therefore, we should investigate the phenomenon of perception in person-relatedness in the case of not only normal people but also autistic people (Hobson, 1989).

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The author has found that a female patient with autism strongly perceived inanimate things, *Kanji*[3] characters, as real persons. It is suggestive that such a phenomenon, or physiognomic perception (Werner, 1948), might be a very characteristic mode not only in infancy but also in autism. This characteristic has some suggestions for the theory on basic disturbances in autism. Therefore, we report on an adolescent patient with autism and discuss the recent psychological theories of basic disturbances in autism.

CASE REPORT

The patient, a 22-year-old female, was an only child. There were no problems during the prenatal period. Birth and physical development were normal. As an infant, she showed poor response to her mother and no anxiety towards strangers. Her dependency on her mother was not noticeable. Her speech was delayed. She did not utter any words that were understandable until she became 3 years old. At age 3, she became very hyperkinetic. She became so sensitive to certain sounds, such as a baby's cry, that she sometimes reacted violently. At age 4, she started kindergarten, but she could not behave socially as the other children did. She was referred to a child guidance clinic in C Prefecture. She was diagnosed as autistic and was put in play therapy for half a year. At home, she was preoccupied with putting whisky bottles in a straight line, writing, and drawing on the walls. When visiting the doctor, she would arrange all the shoes in order,[4] even though she was asked to stop doing it by her mother. At age 5, she became so uneasy at hearing the noise of a car horn that she would approach the car and beat on the bumper. In addition to that, she disliked the noise of a banging hammer so much that she threw it away when she saw it. Because of this, her mother tried to hide the hammer.

When she entered elementary school, she was placed in normal classes. She occupied her time by consulting the *Kanji*-character dictionary every day. She learned so many *Kanji* characters that she was called "Queen of *Kanji* characters by her classmates. In the fifth grade (elementary school), she and her family moved from C Prefectur to O Prefecture, and she was referred to a child guidance clinic in O Prefecture (where they are now living) because of restlessness, hyperkinesis, and violent behavior in

[3]Kanji are the Chinese characters that make up a large part of the Japanese written language.
[4]Upon entering a Japanese hospital, one usually removes their street shoes, and puts on slippers, thereby causing a pile of shoes to accumulate in the entrance way.

school. Her IQ test result was 66 using the Suzuki-Binet Test. She was then diagnosed as autistic with mild retardation. Since she was unable to adapt well at school, she became hesitant about attending. She was often violent to her classmates and constantly afraid of being hurt by them. When she was injured or felt pain at home, she would react by screaming and displaying phobic behavior. She became obsessive by asking her mother repeatedly, "Will I be safe?" She had special skills in writing many *Kanji* characters, but poor skills in calculating and reading. She was advised to go to a special class for the mentally handicapped. However, she entered junior high school and was placed in normal classes. In the seventh grade (junior high school), she became too restless to stay in her classroom for even an hour. Gradually she began to wonder what kind of person she was. In the ninth grade, she became aware that she was suffering from autism. She realized that she could not do things as well as the other pupils. Even after she realized that she was different from the other classmates, her behavior did not change. Instead she became compulsive about smelling her classmates' hair.

After graduating from junior high school, she entered a special technical school for dressmaking near her home. At that time, her behavior changed. She became friendly to her classmates, more emotionally stable, and showed more interest in being properly dressed. She became so independent that she started to go to school by herself. She became absorbed in learning how to make dresses. But she behaved inappropriately so often that her classmates criticized her for her odd behavior. She became very sensitive to being criticized. Therefore, she would rationalize that "Because I am not so clever." "Am I autistic?" "Because I am autistic." "Am I mentally handicapped?" "Because I am mentally handicapped." "I am not so clever." She became so sensitive about her self-esteem that it escalated into a state of panic. Soon after that, she was referred to my clinic. She received medication of pimozide 1–2 mg/day, which resulted in her becoming calm. Her intelligence was tested as TIQ 80 (VIQ 84, PIQ 79) by WISC-R.

In adolescence, she began to have strong feelings for members of the opposite sex. Because of that, she had a strong desire to collect many kinds of *Kanji* characters, specifically "*Kyu-Shu-Den-Ryoku* (in Japanese *Kyushu* Electronic Company)" (Fig. 1). Each *Kanji* character represented to her an imaginary male classmate (Fig. 2), so she called them "*Kyu-kun*"[5] and "*Shu-kun.*" She imagined them as boyfriends. When she was alone, she

[5]In Japanese, "*Kun*" is a term added to the end of a proper name to show friendship or fondness for the person being mentioned. It functions the same as "San," which is the formal Japanese for Mr/Ms.

九州電力

Fig. 1. *Kanji* characters of *Kyu-Shu-Den-Ryoku.*

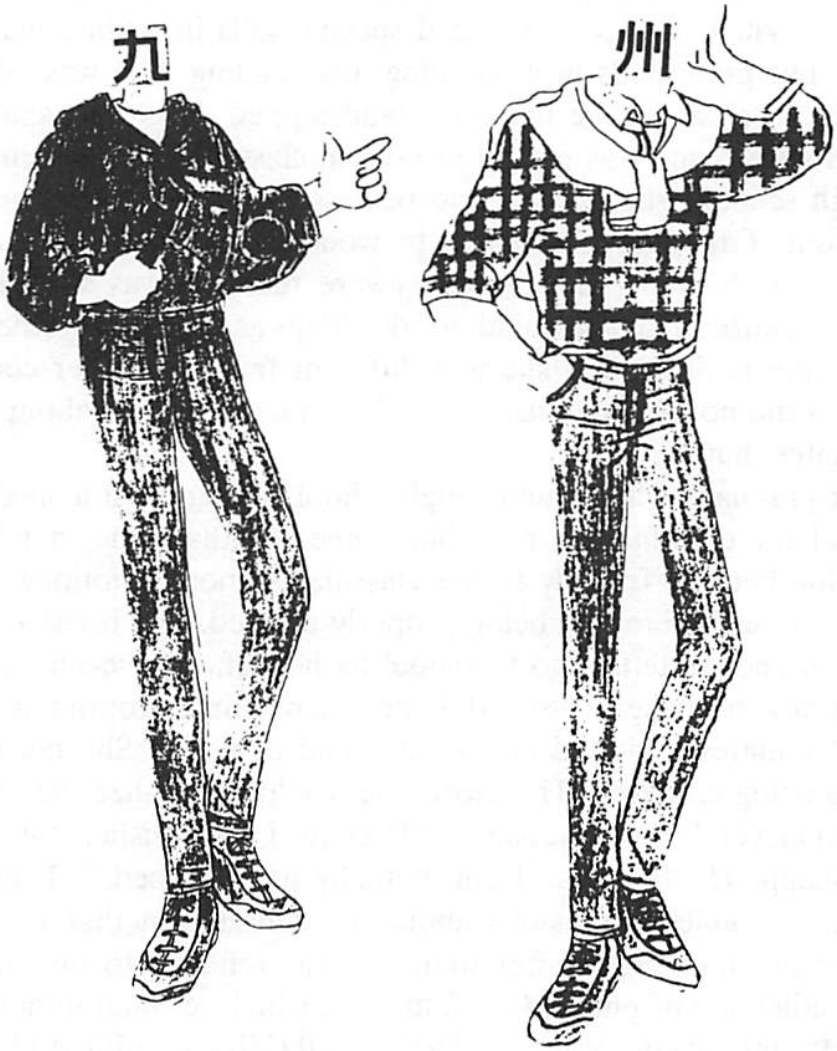

Fig. 2. *Kyu-kun* and *Shu-kun.*

enjoyed speaking to them in her room. She collected these *Kanji* characters from the newspaper and kept them under her pillow when sleeping. In the morning when she woke up, she would say, "Good morning, *Kyu-kun.* Good morning, *Shu-kun.*" She described *Kyu-kun* as being talented in sports, belonging to the basketball club, and being the president of the high school. As to *Shu-kun,* she described him also as being talented in sports and very smart. Surprisingly, she also made their genogram (Fig. 3). She explained

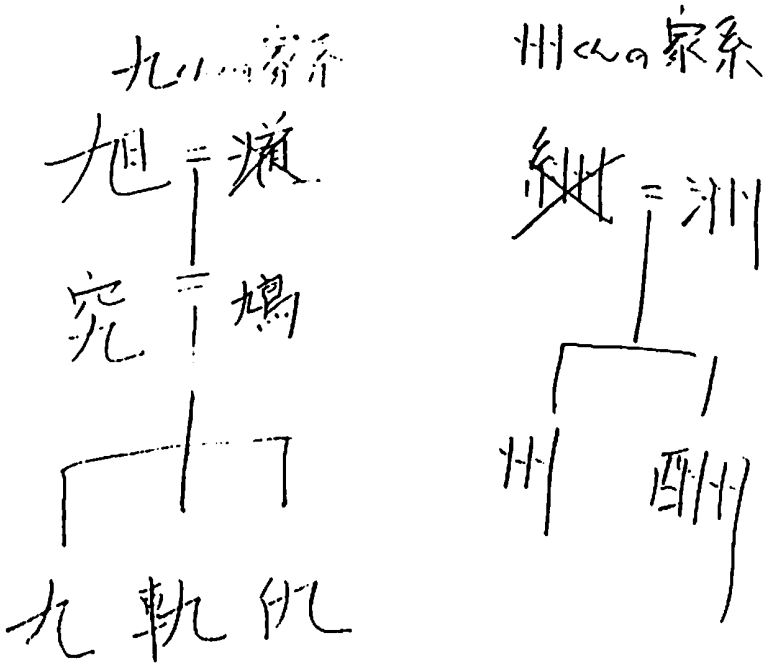

Fig. 3. Genogram of *Kyu-kun* and *Shu-kun.*

that the *Kanji* characters each had emotions, such as "They are angry," "They are crying," or "They are laughing" (Fig. 4). To her their emotions seemed different according to the typeface style of the characters. She was enthusiastic about collecting *Kanji* characters and imagining *Kanji* characters as real people. But her daily life activities were based in reality, receiving some advice from her teachers and the author.

After graduating from the special school for dressmaking, she got a job at a small workshop organized for mentally handicapped persons. She has since become satisfied with her work.

DISCUSSION

In infancy, she had much difficulty communicating with her mother, and her speech was delayed. Since early childhood, she showed both asocial and obsessive behavior. For example, she put whisky bottles or shoes in a straight line. She was diagnosed as autistic in two child guidance clinics. The author, who is a consultant doctor in the Child Guidance Clinic in O Prefecture, could confirm the diagnosis by her clinical record. In accordance with the present diagnostic criteria, she would have fallen under the autistic disorder of DSM-III-R (American Psychiatric Association, 1987).

Fig. 4. Some emotional states of *Kyu-kun* and *Shu-kun.*

The patient has been preoccupied with collecting *Kanji* characters from childhood to adolescence. Surprisingly, the *Kanji* characters have recently begun to be perceived by her not as inanimate things but as real persons. Each of them is described by her to have a detailed genealogy and a brilliant career. During adolescence, she began to display a strong sense of self-consciousness and strong feelings for members of the opposite sex. Her strong feelings for male persons and her strong desire to collect many kinds of *Kanji* characters are suggested to be interrelated with each other. These strong feelings might be conducive to her perceiving the *Kanji* characters as real persons. Physiognomic perception plays a great role not only in the primitive world but also in young children, more than in ourselves, in which the "geometrical-technical" type of perception is the rule (Werner, 1948).

Why does physiognomic perception play a great role in the case of the adolescent with high-functional autism?

Autism was first described as a disorder of affective contact (Kanner, 1943). In the past 20 years, it has been predominantly regarded as a primary cognitive disorder, with socially deviant behavior seen as a secondary manifestation (Rutter, 1983). However, there are many controversies whether cognitive, affective, or social deficit is primary (Baron-Cohen, 1988; Fein, Pennington, Markowitz, Braverman, & Waterhouse, 1986; Hobson, 1989).

Hobson (1989) implied that autistic children have a biologically based impairment of affective-conative relatedness with the environment. He suggests that autistic individuals seem to lack something essential to social perception, a something that is essential for intersubjective communication, which might include the kind of affect-related physiognomic perception (Hobson, 1992).

The author has found that physiognomic perception, which plays an important role in affective communication (Stern, 1985), played a great role in the perception of this female patient with autism, who strongly perceived

inanimate things, *Kanji* characters as real persons. This raises some questions whether autistic people have an innate inability to have affective relatedness with the environment (Kanner, 1943). The author has observed other cases similar to this patient not only in adolescence but also in early childhood (Kobayashi, 1994). Such a mode of physiognomic perception in autism might represent perceptual inconstancy (Ornitz & Ritvo, 1968). Normal perceptions may be shaped by language, in which the geometrical-technical type of perception is the rule (Werner, 1948). Since some autistic people have a poor cognitive-language ability, some of them may perceive inanimate things as real persons, or physiognomically. Autistic people, who have difficulty with interpersonal relationships, may not easily share the meanings with others. Perhaps some persons with autism have such cognitive characteristics that they would give unusual meanings to things they saw. Such a phenomenon would seem delusional to us.

REFERENCES

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington DC: Author.

Baron-Cohen, S. (1988). Social and pragmatic deficits in autism: Cognitive or affective? *Journal of Autism and Developmental Disorders, 18,* 379-402.

Bemporad, J. R. (1979). Adult recollections of formerly autistic children. *Journal of Autism and Developmental Disorders, 9,* 179-197.

Fein, D., Pennington, B., Markowitz, P., Braverman, M., & Waterhouse, L. (1986). Toward a neuropsychological model of infantile autism: Are the social deficits primary? *Journal of American Academy of Child Psychiatry, 25,* 198-212.

Hermelin, B., & O'Connor, N. (1970). *Psychological experiments with autistic children* (Trans. in Japanese by H. Hirai & K. Sato). Oxford: Pergamon.

Hobson, R. P. (1989). Beyond cognition: A theory of autism. In G. Dawson (Ed.), *Autism: Nature, diagnosis, and treatment* (pp. 22-48). New York: Guilford.

Hobson, R. P. (1992). Social perception in high-level autism. In E. Schopler & G. B. Mesibov (Eds.), *High-functioning individuals with autism* (pp. 157-184). New York: Plenum Press.

Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child, 2,* 217-250.

Kobayashi, R. (1994, July). *Phenomenological study on the perception metamorphosis phenomena in autism.* Paper presented at the 13th International Congress of the International Association for Child and Adolescent Psychiatry and the allied Professions, San Francisco.

Merleau-Ponty, M. (1945). *Phénoménologie de la perception.* (Trans. in Japanese by Y. Takeuchi *et al.*) Paris: Gallimard.

Ornitz, E. M., & Ritvo, E. R. (1968). Perceptual inconsistency in early infantile autism. *Archives of General Psychiatry, 18,* 76-98.

Rutter, M. (1983). Cognitive deficits in the pathogenesis of autism. *Journal of Child Psychology and Psychiatry, 24,* 513-531.

Stern, D. (1985). *The interpersonal world of the infant.* New York: Basic Books.

Volkmar, F. R., & Cohen, D. J. (1985). The experience of infantile autism: A first-person account by Tony W. *Journal of Autism and Developmental Disorders, 15,* 47-54.

Werner, H. (1948). *Comparative psychology of mental development.* (Trans. in Japanese by T. Kujiraoka & S. Hamada.) Chicago: Follett.