

On the Specific Speeches Showed by a Mentally Retarded Person with Autism in Block-Designing Constructive Activity

自閉的傾向の知的障害者が積木模様構成活動において示した特異な言語活動について

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脳損傷患者の構成活動に関するA. R. LuriaやL. S. Tsvetkovaらの研究に示唆を受けた我々は、「コース立方体テスト」事態における知的障害児・者の構成活動を発達神経心理学的な観点から分析することを試みてきた。今回我々は、この構成活動の事態において特異な言語活動を呈した自閉症的傾向を持つ知的障害者に遭遇した。彼は、その自閉症的傾向の故に、検査導入時の教示の理解に困難を示し、検査実施が危ぶまれたほどであったが、実際に検査が始まると、案に相違して、用意されてある17課題すべてを解決し、田中・ビネー検査からの予測をはるかに上回るパフォーマンスを示した。そのこと自体驚くべきことであったが、検査の中でのみ示した彼の言語活動も、特筆に値する独特な特徴を持つものであった。彼の言語活動は、日常生活でのコミュニケーション場面では、極めて不活発であったが、構成活動の場面では、一変して、非常に活発な発話（独語）を伴わせ、むしろ多弁であった。そしてそのほとんどは、構成見本の空間的な特性の分析や積木（構成要素）の方向操作に係わるような表現ではなく、行動の開始や終了の合図や確認のような表現、「自分の構成行動を実況中継（自分自身を三人称で表現）」する放送アナウンサーもどきの発話であった。彼のそうした言語活動の機能的性格は、構成活動に必要な空間的な分析・操作を担う成分に奉仕するものではなく、構成行動を企画・制御する成分に奉仕するものであることが示唆された。

脚注

本稿は、「小松（1997）積木構成活動の形成機序に関する探索的研究（1）～岡目八目効果と枠付け効果において異なる特徴を示した発達障害児・者の事例紹介を通して～ 視覚認知の形成機序の解明とその応用に関する研究（平成7～8年度科学研究費補助金基盤研究A-1研究報告書）, pp.32-41.」の一部を加筆・修正したものである。

1. Introduction

Receiving suggestions from A. R. Luria and L. S. Tsvetkova(1964) and Цветкова (1966), we have used "Kohs' Block-Design Test" to analyze constructive activities of mentally retarded people(MRs) from the developmental neuropsychological viewpoint (Komatsu, 1983, 1985 etc). In the course of our studies we have had an unexpected encounter with an autistic person with relatively severe mental retardation who showed very unique phenomenon. He does not try to use his own words actively for communication in daily life. But he used them actively during solving the construction tasks.

The purpose of this study is to make a report on his characteristic speeches in the block-designing constructive activity and to seize an opportunity to consider the roles of verbal activities in the activity.

2. Method

1) Participant

The characteristics of the case illustrated here, S.M., are as follows:

- Chronological Age ; 18:8
- Intelligence Quotient ; 35
- Mental Age ; 6:1
- Social Quotient ; 74 (communication ; 8:6 self-control ; 8:6)
- Autistic behavioral characteristics ;
 - Echolalia
 - Sameness or persistence
 - Less responsiveness to experimenter's instructions and/or supportive intervention
- Other possible behaviors ;
 - Speech (utterance as soliloquy) supported by his relatively rich vocabulary
 - Reading and writing of easy Japanese characters
 - Copying shape of triangle and diamond
 - Imitating various working procedures

2) Procedures

We adopted "Kohs' Block-Design Test" this time too. It is well-known as one of the types of so-called "performance test" which measures intelligence. A. R. Luria and L. S. Tsvetkova (1964) and Цветкова (1966) used this test to analyze the disturbance of constructive activity in local brain injuries. The immediate purpose of this test is to examine whether the subject is able to construct the presented design (See Fig.1) with 4 (task-1 to -9), 9 (task-10 and -11), or 16 (task-12 to -17) blocks or not. Each of the blocks has 4 "one-color sides" and 2 "two-color sides" divided on the diagonal (See Fig.1).

We gave S.M. the test according to the formal test manual (Kohs, 1920; Ohwaki, 1966).

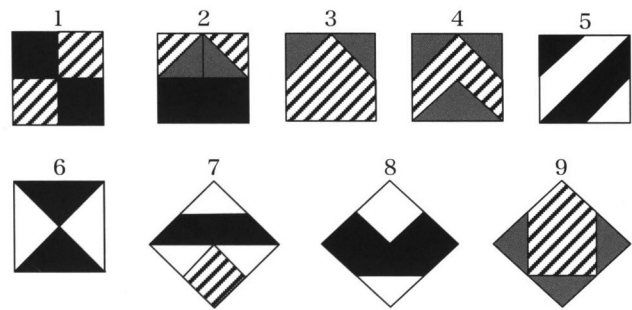


Fig.1 Examples of designs used as models

3. Results and Discussion

It was hard for S.M. to understand experimenter's instructions at the opening of the test.

His echolalia, less verbal responsiveness and ambiguous verbal expressions prevented him from comprehending the instruction. Though experimenter made all possible effort (including showing him how to do practically), it seemed to us that he did not comprehend the instructions perfectly. Unwillingly, that is, before the issue is thoroughly discussed or solved, we made the decision of beginning the test. Speaking truthfully, we did not predict that he would have good performances.

He, however, got to be contrary to our expectation as the test progressed.

To our amazement, he could solve all of the tasks (including even the 6 tasks needing 16 blocks) by his own efforts. This meant that he had shown performances far better than that expected on the basis of MA level resulting from Tanaka-Binet IQ Test. We, until now, met with such the case at times. But it was our first such experience in the mentally retarded cases of 8 (MA) and under.

Although he made mistakes of orientation in operating the "two-color sides" of block, in most cases he check his manipulations of blocks, found out his mistakes and corrected.

He showed us another surprising fact

immediately after changing to the tasks needing 16 blocks. "It needs 16th blocks. I will complete (with them)" he said. It is not easy for anyone to understand the number of the blocks needed in such the task. Experimenter, involuntarily, asked him. "Why did you see it (model) needs 16 blocks ?" Unfortunately, he said "I understand" only. His later performances proved his declaration is right. He solved the last number task (the 17th task) smoothly in 2' 13".

His speech activities were very unique and impressive. Table 1 shows the examples. He tackled the tasks as he uttered aloud. By contrast, his speech activities for communication are very inactive. Except for the situation of the construction tasks, he never talked to experimenter. His replies to experimenter's questions were also limited to simple words.

Incidentally, it should be noted that most of his speech activities did not have something to do

with spatial analyzing and/or operating needed in the constructive activities. That is, most of his utterances were utilized in order to, for example, give some signal of starting or ending of task to himself, and to express or "on-the-spot broadcast" his own situation in the course of constructing (He called himself in the third person, "Mr. Mee ([mi:kun] in real Japanese pronunciation)"). These suggest that most of his speech activities serve to the planning and/or controlling needed in the constructive activities.

He, autistic S.M., does not try to use his own words actively for communication. But he uses them (however, his utterances are soliloquies only) actively in order to perform or solve the construction tasks. How he has proceeded the steps of development? It is very interesting for us in possible relations of constructive activity with verbal activity (particularly with the function of regulating behavior). To approach the issues is our next task.

Table 1 Examples of Utterances of S.M. in Constructive Activities.
(His utterances were often not only ungrammatical but also unintelligible.)

Occasion	Utterances (Japanese in reality)
at the beginning of construction	"Mr. Mee (he calls himself like this) will produce it."
	"It needs 16th blocks. I will complete (with them)."
	"Will Mr. Mee make (someone) produce ?"
	"Action puzzle !" (unidentified but maybe used as a sort of signal of beginning or finishing)
	"What will Mr. Mee produce ? Come on !"
In the course of construction	"All right ! (O.K. !, Good !, Fine ! Etc.)"
	"What will Mr. Mee produce really ? "
	"It is the hand power of action puzzle." or "It comes to be an action puzzle." (unidentified expression but maybe used as a sort of declaration of making satisfactory progress)
at the end of construction	"Action puzzle !" (unidentified but maybe used as a sort of signal of beginning or finishing)
	"Good Job !"
	"Look ! Nice Job !"
	"It has come to be an action puzzle." (unidentified but maybe used as a sort of declaration of completion)

4. References

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