Types of Alcoholic Alteration of Rorschach Test Performance -A Case Study-

TYPES OF ALCOHOLIC ALTERATION OF RORSCHACH TEST PERFORMANCE

——A Case Study——

by

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I. General Remarks

(1) On the Effect of Alcohol

By comparing the Rorschach test performance given to the subject in alcoholic condition with that in normal condition, investigations were pursued with a view to examining what aspect of his personality was expressed more clearly under which of the two conditions. The difference of expression of personality between two conditions was regarded as "alcoholic effect". The alcohol testing was administered at first and then the normal retest followed. It may be possible that the effect of the order of testings will have influence on the difference of the performance, besides purely alcoholic effect. The endeavour has been made to remove as much of such non-alcoholic effect as possible, by examinations based upon the finding of the other sources (e. g., the knowledge of the change of performance which will be gained by the simple repetition of testings). Some alcoholic effects may be recognized as general tendencies among most of subjects (cf. (1) and (2) and others will be found as special tendencies only in subjects who have some peculiarities.)

(2) The types of alcoholic change of test performance

When the alcoholic alteration of Rorschach test performance is examined closely and carefully, there an obvious contrast of two types is to be seen as follows.

(i) Perceptual type or stimulus-dependent type (A-type)

This type indicates the strong tendency to verbalize freely and frankly the recognized contents in responding to Rorschach blots. It seems their responses as associations do not indicate any consistency. Therefore, it is difficult to find any context or anything that will indicate a "theme" in the performance of subjects of this type. In such cases, we see the over-controled or constricted personality.

(ii) Conceptual type or the type of narrator of past

personal experience (B-type)

This type indicates a convergency of associations, or, a certain theme, in alcoholic intoxication. Some personality traits suggesting more or less the subject's inner problem are found in many cases. The subjects of this type tend not to give simple and brief word responses, and their responses mostly show some consistency. That is, one response in Rorschach protocol was so long that it consisted of a large chain of words in general, often with contents suggesting the subject's inner problem, and such responses were observed again and again through his test performance in Rorschach blots. It seems that these tendencies were strengthened by alcohol espacially in the individuals who showed aggression, self-exhibition, pedantry or boasting (1).

II. Case Study

The protocols of the subjects tested in our previous experiment are studied anew here. The procedure of the experiment should be refered to the previous report (2).

(i) Conceptual type (B-type)

Case K.S., 23 years old, male student of sociology.

He was a heavy drinker and boasted himself of drinking capacity. In effect, he proved to be the heaivest drinker of 13 subjects. He was, however, mild in drinking manners and very cooperative at the beginning of the experiment.

Rorschach test was carried out in an euphoric state of the subject who, after taking 600cc *sake*, drank some bottles more. Before and after the testing the basal skin resistance value was measured and the reflex wave was simultaneously recorded during the test. (The result of the G. S. R. records is described in our former paper, (2) pp. 22-23; (3) pp. 3-5, 10-12).

After talking a long story while he looked at the 6th card (half an hour elapsed after the beginning of testing and eighty minutes after beginning to drink), suddenly and conspicuously he much more intoxicated. Then, the disorder of pronounciation was observed, and the questions and answers in the inquiry period was interrupted by bursts of emotion frequently. When the experimenter was inquiring about the response to 9th card, he began to knock the card in high exitment. Thereafter, he got dead drunk and gave no more reply.

It is interesting to study a relation between his response time and the progress of intoxication. The shift of response time is shown in Fig. 1. The figure indicates that the response per se became longer according to the progression of intoxication but after the intoxication reached a certain limit the response conversely became shorter. This subject was asked to give one response to each card and talk a story continously. Table 1 containts the summary of his long responses, in comparison with the responses in normal condition. The subjective responses take a high percentage of 60% in alcohol condition: these "subjective" responses included some references to himself. Besides, in alcohol condition, there were no objective responses such as popular

Table 1. Reponses of Case K. S.

1st Testing (Alcohol Condition)					2nd Testing (Normal Condition)					
No. of Cards	Character	Action and Situation of Character	Class of Objectivity	Scores	No. of Cards	Character	Action and Situation of Character	Class of Objectivity	Scores	Exchange Type of Response
I	(1) An Eagle	is making an attack upon me. Very awful.	Subj.	W FM∓ A	I	(1) A Bird	is spreading his wings and attacking.	Obj.	W F± A	C
II	(1) Two demons	are trying to set up an agreement or conflicting for possession of my dead corpse.	Subj.	D M ±Fc (H)	II	(1) Two Wizards (2) A face of wolf	are fighting	Obj. Obj.	WM±Mask(H)P dr F± Ad	C A
III	(1) These	are combatting together in order to eat my dead corpse. We can not see which will win.	Subj.	D M± (H)	III	(1) Two men (2) Two men	wrest something each other ran against each other in roller-skating.	Midd. Obj.	DM±C sym H D M± H. Pict.	C A
IV	(1) A flying sqirrel	Some years ago I fought with him and gained a victory. Although he was defeated, he waited thereafter for an opportunity to take revenge all the time.	Subj.	W Fc− A	IV	(1) A very big beast	is dashing upon this way.	Midd.	W FM∓→(MA)	C
V	(1) A bat	says that he will revenge himself on me as I drove him away from his house.	Subj.	W F− A	V	(1) A bird	is stretching her wings.	Obj.	W F± A	C
VI	(1) A cock	is crying for help as I am strangling him to death.	Subj.	W F− A	VI	(1) A fox-skin		Obj.	WF±A. Obj.	O. A
VII	(1) These	make fight against each other to persist in their own opinions.	Midd.	D M ± H → A	VII	(1) Two foreign madmoiselles	are dancing.	Obj.	D M±Fc H P	C
VIII	(1) An eagle	the same with that of card I. It is very awful.	Midd.	D F ∓ A	VIII	(1) Two leopards	pounce upon a dead mammal.	Obj.	D−W FM± AAt	O. A
IX	(1) These	are in enmity with and fighting against each other, concentrating their all energy.	Midd.	D M ∓ H	IX	(1) Two dragons	are burnt alive together.	Midd.	D−W FM±Fm (A) Fire	O. A
X	(1) Two magicians	are disputing.	Midd.	D M ∓ (H)	X	(1) Two women	are combatting. Their viscera are fighting against each other, too.	Midd.	W M∓ H, Ats	C

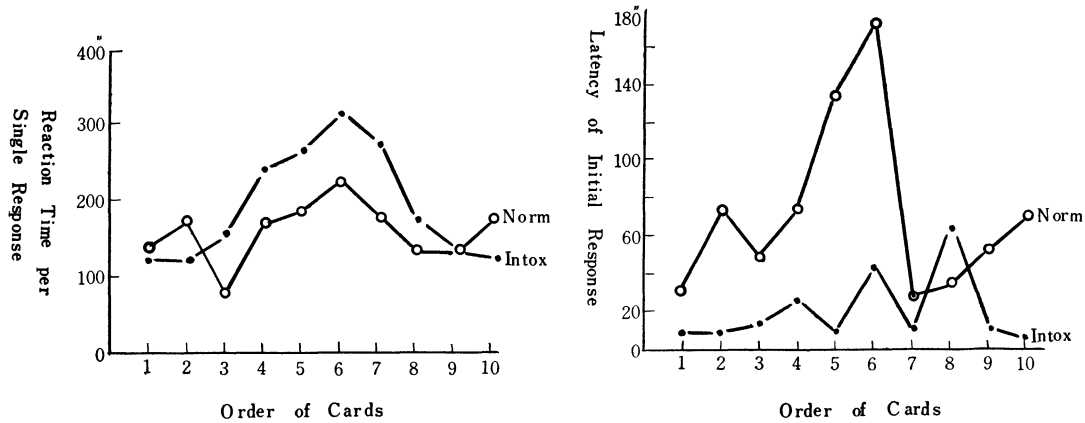

Fig. 1 Transition of Response Time and of Latency of Initial Response in K.S.'s Performance.

responses and even the rest, 40% of all cases were taken up as more or less special and subjective responses, which could be classified neither into "subjective" class (middle class). In normal condition, of course, almost all subjective and special responses disappear. (see table 2).

Table 2. The Grades of Objectivity of K.S.'s Response.

	Subj.	Mid.	Obj.
Alcohol	6 (60)	4 (40)	0 (0)
Control	0 (0)	1 (9)	11 (91)

It may be one of reasons why the response was lengthened under alcoholic intoxication that he often gave a long explanation and complement as his responses, associated with his past experiencies. Another reason may be that the psychic content present itself in a form of chain reaction, as the conscious control is weakened. Thus, the responses develop themselves apart from the recognition of blots. Therefore, the recognition of external stimuli was only an enlightener of association. And the recognized object was only a subject of his long story and sometimes it was personified. Thus, the response words were pronounced, though the response experience was not yet fully completed. It is natural that the form level of such responses are low. Table 3 shows F + % was 0% in alcohol condition, 100% in normal condition, new F + % (Klopfer & Kelley) was 70% in alcohol condition and 83% in normal condition. The latency of response also was short generally under alcoholic intoxication, (mean time 21.7 seconds), as seen in Fig.1, but in normal condition it lasted very long and the mean amounted to 76.5 seconds. In addition, it is interesting for us to find that in normal condition the curve of reaction time

Table 3. Appearance and Disappearance of Responses in K. S.'s Performance.

Alcohol Testing \ Control Testing	0	—	∓	±	Σ	
0	0	0	0	2	2*	
—	0	0	0	3	3	
∓	0	0	1	3	4	10**
±	0	0	0	3	3	
Σ			1	11		
				12***		

* Appeared in Control Testing Only
** Total of Alcohol Testing
*** Total of Control Testing

per single response was nearly the same as that of response latency and the response which took long time was given after a long preparatory period, but such a relation was not to be observed in alcohol condition. In the examination of test performance in normal condition, it is observed that the subject had a strong tendency or habitual attitude to express the recognition after he gave it a meaning in his fashion and to construct it in a unique manner in stead of giving a verbal expression to the recognition as it was. However, under alcoholic intoxication, the response was confused, as the whole conscious function, especially the intellectual function which might support such an attitude was degraded. The breakdown of his inner attitude, besides the restriction of responses by his past experience, made easier a disclosure of his inner problems.

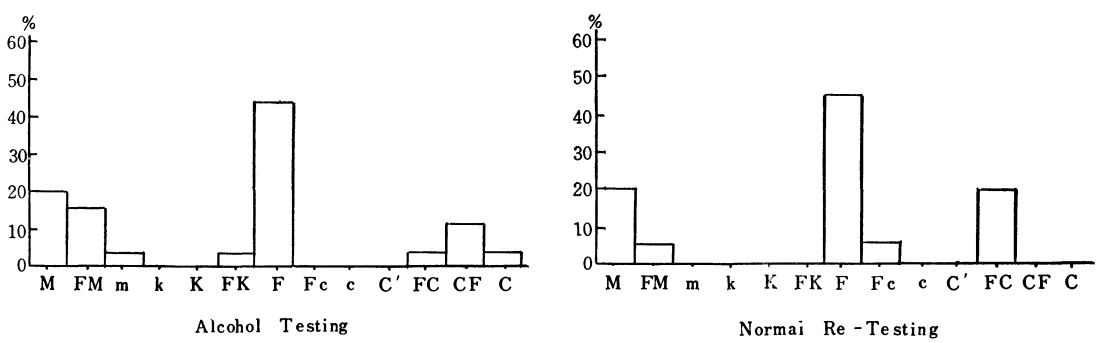

Fig. 2. The Psychogram of Case K. S.

His inner main tendency must be generally considered to be the subjective conginition of outer world especially subjective overestimation of human relations. But judging from the result of normal testing, there are only some possiblities of his possessing a rather gloomy view of life, and of being threatened

by some being like "father" and his acceptance of external emotional stimulus is slightly limited but the response itself remains in adaptive level.

From the resutls under alcoholic condition, may follow that in his heart lurks resistance to some being like "father" and self-reproach, the paranoid-like understanding of human relations, the frustration of maternal protection and some trauma, in addition to the limitation of acceptance of external stimuli.

In comparison between the diagnosis based on the normal testing and that based on the alchhol testing, it seems that the alcohol testing opens a door leading to his personality. The reason may be ascribed to the failure of the habitual control function under alcoholic effect.

(ii) Perceptual type (A-type)

Case S.N., 22 years old male student of science of religion.

He drank very cheerfully and was very cooperative with us in our experimentation. But he was so much intoxicated at the beginning of testing that he could not maintain his posture constantly and his pronounciation was out of order.

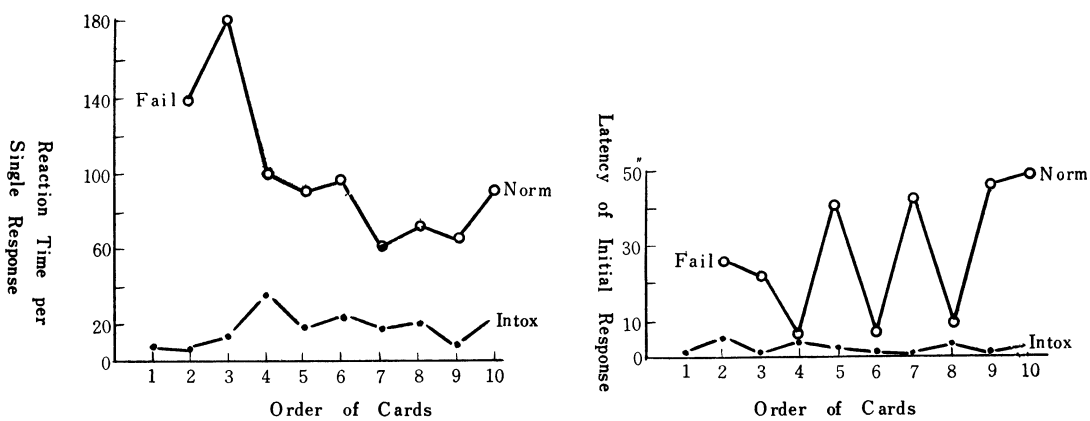

Fig. 3. Reaction time in S.N.'s Performance.

In the Rorschach testing under alcoholic intoxication, the latency of response was very short as is obvious in Fig.3. (Mean latency was 2.8 seconds). He did not show the tendency to comlpete incoherence of his responses or to correct ambiguity of his recognition. (The mean reaction time per single response was 22.4 seconds.) Table 4 indicates that F + % is 67% and new F + % is 59%, besides this, a few sexual responses were expressed. It was considered for us that these features of alcoholic performance did not result from his subjective operation of response-making process but only came from mere degradation of conscious control and intellectual function. Because his response was exclusively based upon his recognition, though it might be incomplete, and he did not

Table 4. Appearance and Disappearance of Responses in S. N.'s Performance.

	0	/	−	∓	±	Σ	
0	0	0	2	0	7	9*	
/	5	0	0	0	0	5	35***
−	0	0	0	0	1	1	
∓	11	0	0	1	1	13	
±	13	0	0	1	2	16	
Σ	29**	0	2	2	11		
			15****				

* Appeared in Control Testing only
** Appeared in Alcohol Testing only
*** Total of Alcohol Testing
**** Total of Control Testing

select or construct the recognition or did not give any subjective meaning to it. For that reason, his responses were rather highly objective inspite of alcoholic intoxication (See Table 5.). These responses are summarized in Table 6. which also indicates the responses in normal condition for comparison.

His personality, diagnosed on the basis of the test score obtained from the performance under alcoholic intoxication, may be passive to external stimuli as well as internal ones and inadequate or insufficient for controling exogenic emotional stimuli. His sexual interest or drive may be in high level and its control perhaps rather weak.

Table 5. The Grades of Objectivity of S. N.'s Responses.

	Subj.		Mid.		Obj.	
Alcohol	0	(0)	4	(11)	31	(89)
Control	0	(0)	3	(20)	12	(80)

On the contrary, in normal testing, he failed in card I and gave comments in cards I, III, IV, and VII. The latency of response (its mean was 24.2 seconds) and the reaction time per single response (its mean was 89.8 seconds) became by far longer than those in alcohol condition. These features of performance suggests the existence of strong control or suppression in his normal testing. The level of intellectual function was lowered under the alcoholic influence but this may be assumed reasonably to be recovered sufficiently in the normal testing. In spite of it, F + % = 57%, new F + % = 73% and the responses newly appeared in normal retesting, form level of which is + or −, took only 78%, and the responses of change type, form level of which was better in

Table 6. Responses of Case S.N.

1st Testing (Alcohol Condition)					2nd Testing (Normal Condition)					
No. of Cards	Character	Action and Situation of Character	class of Objectivity	Scores	No. of Cards	Character	Action and Situation of Character	Class of Objectivity	Scores	Exchange Type of Response
I	(1) An eagle (2) A cicala (3) A mediaeval helmet		Obj. Obj. Obj.	W F± A W F± A W F± Obj	I	(1)			*Fail.* *Comm.*	0 0 0
II	(1) A nose (2) Towada Lake (3) Red bill of some one		Obj. Midd. Midd.	S F± Hd WS FK∓ Lasd−Map D CF Ad	II	(1) Two men	putting on masks of *okagura* (shrine pantomimic danse) and dansing with face to face.	Obj.	D M± H. Mask	0. A 2×0
III	(1) Two men (2) Two skeltons (3) A dead cat (4) Human lungs	Face each other are opposite to each other and stretching their arms. has been mummified.	Obj. Obj. Obj. Obj.	W M± H W M±Fc Atb W F∓ AAts D FC∓ Ats	III	(1) An expression of religious thought: a guard	is standing on this side of crief. Yonder of crif is another world. And on this side of it is this world.	Midd.	W F±FC HSymb. *Comm.*	0. A 3×0
IV	(1) A bearskin (2) A vulture (3) A man (4) A bat (5) A head of horse	is dessected, lying prone.	Obj. Obj. Midd. Obj. Obj.	W F∓ A. Obj. W F±FK A W F∓ Ats W F∓ A P D F± Ad	IV	(1) Some skin		Obj.	W Fc∓A. Obj. P *Comm.*	C 4×0
V	(1) A bat (2) A softer sex (3) A head of Dragon	sets her legs apart, widely.	Obj. Obj. Obj.	W F± (A) W M± Sex, Hd DF± (Ad)	V	(1) A bird (2) A head of human	wearing an ornament of an opera. (The nature of this response is nearly the same to that of Do.)	Obj. Midd.	W F∓ A D F± Hd *Comm.*	C 0. A 0
VI	(1) A violin (2) A chinese flag	those which are costomly used in procession.	Obj. Obj.	W F± Obj W F± Obj	VI	(1) Musical instrument		Obj.	W F± Obj.	C 0
VII	(1) A baby (2) Two human	Open its legs make faces to each other	Obj. Obj.	W M∓ Hd W M± H P	VII	(1) Europian girls (2) Two men (3) The heads of child & mother dog	Are dansing. turn away their backs each other and only their heads are opposite to each other. An oriental danse. The kind of them are different but the small one fawns down mother dog. (This is also nearly the same to Do.)	Obj. Obj. Obj.	W M± H W M+ H D FM± A. Ad *Comm.*	0. C C. A A
VIII	(1) A female sex organ (2) A skelton (3) A badger (4) Rocks	Spooney look. lower one sees upper one with reproachfull look.	Obj. Obj. Obj. Midd.	W CF Sex D FC∓ Atb D F± A W M∓Fc, CF. Rock	VIII	(1) A coat of arms (2) An animal		Obj. Obj.	D FC± Obj. D F± A	0. A C 3×0
IX	(1) Fire (2) Statue of lion dog (3) Fire (4) An animal (5) Two seahorses	 open his mouth wide. float with face to face.	Obj. Obj. Obj. Obj. Obj.	D mF Fire D FM∓(A)→A D CF, mF Fire D FM∓ Ad D FM± A	IX	(1) Lethal ash (2) A crater	exprosion.	Obj. Obj.	D FC± Pict. Expr. D FC± Pict. Expr.	C 0. A 3×0
X	(1) Hell (2) A Lizard (3) A fetus (4) A beetle (5) A Spider		Obj. Obj. Obj. Obj.	W CF ABST D C H D FM± A D FM± A	X	(1) Harmony (2) A design		Midd. Midd.	WF− Abst. Feeling W F− Abst	0. A 0. A 3×0

normal retest, took 34% and 17% of change type responses became worse in normal retest (See Table 4.). The objective responses took 80% in all responses of normal retest.

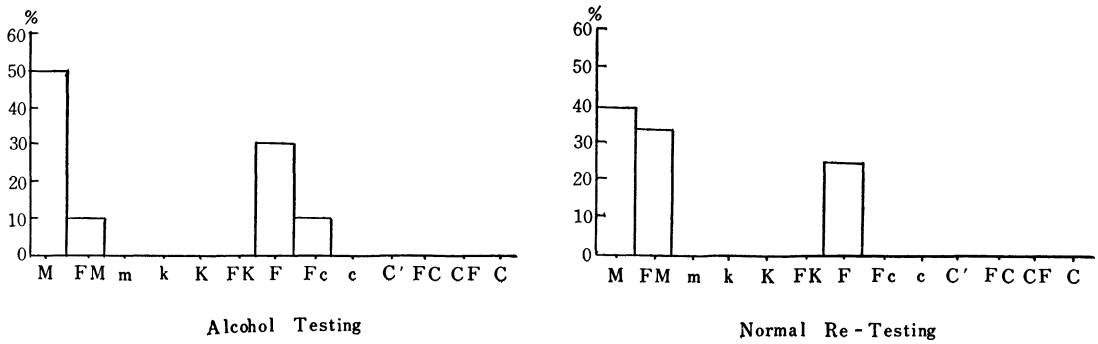

Fig. 4. Psychgram of Case S. N.

On the basis of test scores of normal conditions, a childish personality can be imagined. His control function seems slightly strong and not good, but it does not prevent the acceptance of stimuli. Excepting this inadequate control, it is not a question demanding any special attention to his personality.

Indeed, it was very interesting for us that, in cases belonged to the type A, the reappearance of the same response slightly modified in its expression ("change" type of response) was observed in the least frequency, through the

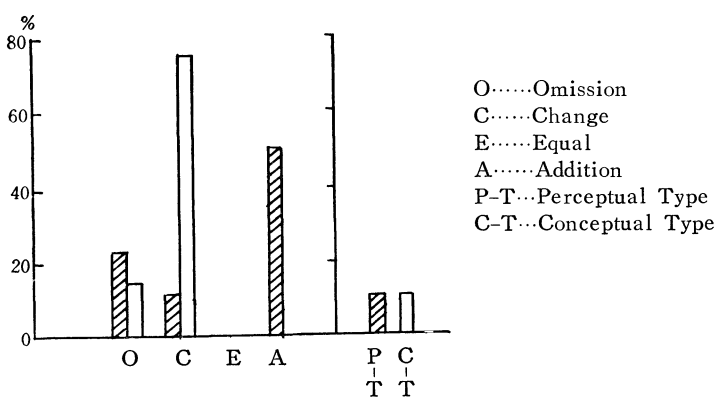

Fig. 5. Percentage of Subjects who were classified through their Maximum Type of Exchange of Responses.

repeated two testings. New responses frequently appeared in the second testing

(addition case) and responses, which were observed in former testing, were omitted frequently. Conversely, the "change" type was mainly seen in the shifting of performance of type B (See Fig.5.).

III. Comment and Conclusion

The above mentioned two cases were described as representatives of two types of alcoholic alteration of Rorschach test performance. But the manner of dividing our subjects into these two types may allow of some exceptions. The classification of type A was rather easier. Among cases which will be considered to be classified to type B, there were some subgroups. The most characteristic feature of such a subgroup was that the test performance hardly affected by alcohol even though the subjects seemed to possess some inner problems. This contradiction is due either to the fact that he drank too little or that his response pattern was too strong to be influenced by alcohol. In this paper we approached the alteration of performance through the case study. Here we treated the problem of cognitive and reactive attitude. The case study showed the possibility of discrimination of two types, that is a perceptual and cognitive type, and a subtype. The contrast of these types has some similarity to the contrast which was described by Warshaw et al. (4) in case study using sodium amytal, of normal subjects in comparison with neurotic patients posessing strong control and poor productivity.

But these types have a similarity to general types of cognitive attitude in connection with individual difference of perception. If such is the case, our classification was not dependent on the characteristics of personality construction but rather on the temporal condition of testing, at least in our normal students who hardly indicate pathological problems.

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Résumé

Les auteurs ont décrit la méthode générale de leur étude des cas et les considérations conclusives qu'ils en avaient obtenues déjà.

Leur étude des cas a eu l'intention de savoir quelle partie de personalité, en quelle façon, se montrera dans le comportement de l'épreuve de Rorschach éxécuté dans l'intoxication alcoolique. Des cas ont été éxaminés principalement au moyen de la comparaison de comportement de l'épreuve de Rorschach dans l'intoxication alcoolique avec le résultat du contre-essai éxécuté de nouveau deux mois après.

Le résultat de cette étude a suggéré que l'alcool n'ait pas donné une effet uniforme à leurs sujets, c'est-à-dire, les auteurs ont observé quelques types de l'altération alcoolique du comportement qui s'est montré dans l'épreuve de Rorschach.

Le premier type s'est appelé type-B dans un tableau des sujets de leur recherche antérieure (2, p. 21). Les particularités générales du type sont: (1) qu'une certaine limitation dans la production des réponses, (2) que des manières de répondre ne sont pas naives, et qu'un champ de la production de réponse est étroit, (3) une association limpidement déviée, et (4) une compréhension conceptuelle des taches et une addition d'une histoire d'expérience personelle. Le type peut être appelé conceptuel ou celui de raconteur de l'histoire d'expérience personelle.

Le groupe des sujets de ce type a contenu beaucoup de personnes avec des problèmes plus stables dans l'organisation de la personalité. Les auteurs ont interprété que l'alcool ait obligé aux sujets de manifester ces problèmes intérieurs plus facilement ou que dans l'intoxication alcoolique le comportement d'épreuve a été contraint plus facilement par ces problèmes intérieurs.

Mais, le groupe de sujet du type-B contient un sousgroupe qui n'a pas été affecté par l'alcool.

Le second groupe est celui qui s'est appelé type-A. A l'avis des auteurs, les traits caractéristiques du comportement de ce groupe sont (1) qu'il n'y a aucune déviation dans leur associations, (2) que le processus de perception à réponse est immédiat et rectiligne, et (3) qu'il semble que les réponses données par ce groupe leurs positions au niveau presque indentique. Ce type peut être appelé perceptif.

Il paraît qu'aucun sujet de ce type n'ait un problème clair dans sa personalité. Donc, il n'a pas été observé que la couche plus profonde de personalité s'est manifestée dans l'intoxication alcoolique.

Il y a beaucoup de cas où des réponses données par ce groupe A sous l'alcool ont disparu dans le contre-essai et de nouvelles réponses ont été données dans la condition dérnière. Au contraire, dans la plupart des cas au type-B, des réponses données dans l'épreuve précédente sous la condition alcoolique se sont representées dans la seconde épreuve, étant modifiées un peu(Fig. 5).

Les auteurs ont rapporté théoriquement sur deux types de l'altération du comportement par un effet de l'alcool et ont décrit des cas representatifs de ces deux types.