# BEHAVIOUR PATTERNS IN MENTAL DISORDER By

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# INTRODUCTION

In psychiatry, generalization is a process which requires careful handling. It must be firmly rooted in everyday experience of the practical empiricism which gets results, and must be free, as far as possible, from the numerous fallacies which have brought "armchair" philosophizing into disrepute. These are formidable requirements, but fortunately one way of meeting them lies ready to hand. There are doubtless many others apparent to more fertile minds, but the one with which this paper deals rests on the fact that a patient who has been successfully treated by a psychiatrist behaves, when well again, in a different manner from that which he displayed when ill. He is cheerful, not depressed, relaxed, instead of being tense; realistic and socially enterprising as opposed to being autistic. If the term "Behaviour" is used in a sufficiently wide sense, it can cover the great majority of psychiatric phenomena without losing its cardinal virtue for the present purpose, namely that behaviour can be observed and its manifestations measured with considerable accuracy. The products of observation can be handled statistically, thereby avoiding armchair theorizing. Admittedly the interpretation of statistically derived findings presents some difficulty, but this is not insuperable. It is usually easier than the process of generalizing from observed data without the benefit of statistical pre-digestion.

In previous studies (Monro, 1954, 1955) I made preliminary essays in the use of this technique of generalization in the psychiatric field. Those works, in their turn, derived from the work of such men as Allport (1937), Burt (1940), Cattell (1946), Eysenck (1947), Kretschmer (1921), Stephenson (1952), and important germinal ideas were provided by Professor J. Drever of Edinburgh University. Briefly, my former studies attempted to describe the behaviour of mentally disordered people in terms of traits, and to explore the relationships between these traits as actually observed in a sample population of 200 patients, carefully chosen to be as representative as possible of the disordered population of the country as a whole. In the first paper R-Technique was used and 35 correlation clusters, or compound traits, were derived from the data. In addition, a relatively rapid and accurate method of rating patients for these 35 compound traits on a 5-point scale, was described. These 35 compound traits were considered to be descriptive elements relating to a wider area of behaviour than that denoted by the simple traits from which they were derived, but not yet relating to as wide an area as that involved in the major psychiatric syndromes. The compound traits, therefore, were not regarded as equivalent to psychiatric syndromes, but rather as the descriptive bricks from which psychiatric diagnoses could be built up. The actual development of this theme forms the subject of this paper.

The second study referred to above used Q-Technique, and yielded 13 Types. It is referred to here because these types, with certain exceptions, did not correspond to the syndromes described by clinical psychiatry, but rather to the basic personality types encountered among the mentally ill. Also, the results of this Q-Technique study have some relevance to the findings presented in this paper.

## SCOPE AND TECHNIQUE OF THE ENQUIRY

The question chosen for study was the relationships which might be found to exist in the mentally disordered between the 35 compound traits referred to above. Two alternatives presented themselves:

- (a) Factorial analysis of the data already accumulated;
- (b) A further R-Technique study of the correlations between the 35 compound traits.

The latter was chosen, as it was felt to have priority over the former. Cattell's (1946) argument was accepted, to the effect that correlation-cluster studies yield descriptive elements rather than interpretative formulations, while factorial analyses do the reverse. It is sound scientific method to make description as complete as possible before proceeding to interpretation, and my 1954 study clearly left the descriptive process only partially developed. That enquiry started from Cattell's description of a trait as a collection of reactions or responses bound together by some kind of unity which enables them to be dealt with under one term, for most purposes. It next accepted Cattell's (1946) contention that co-variation is the basis of unity. From these considerations it follows that correlation-clusters or compound traits are devices for economizing terms in the description of behaviour. They retain unity, which is the essence of a trait, because the constituent simple traits intercorrelate positively to a significant degree. That is simply to say that they appear and disappear together. As an example, it is obviously more economical, and just as accurate in trained circles, to describe a patient as depressed, as to elaborate that he is miserable, retarded, pessimistic and given to rumination on painful topics. My 1954 paper brought this economizing process to the point of describing behaviour in terms of 35 variables, the compound traits already referred to. The next obvious step appeared to be to discover the intercorrelations, if any, between them. It also seemed wise to repeat this process, if possible, until the correlations became so low that the unity of the resulting compound traits was suspect. This process held out the promise of demonstrating the extent to which descriptive generalization could be pushed without becoming so subject to qualification as to be meaningless.

The data which are elaborated here were provided in raw form by these previous enquiries. The sample population had actually been rated for the 246 simple variables, and the process checked for accuracy by rating a proportion of them in collaboration with colleagues. The correlation between our results was of the order of plus 0.850. To save reference back to the earlier works, the composition of the sample in terms of psychiatric diagnoses is set out in Table I below.

				.,	Sumpto Lance	-	
Sabiasabasais					Women	Men	Total
schizophrenia	••	• •	••	••	9	10	19
Manic-Depressive	••	••	••	••	21	17	38
Paranoid					3	3	6
Involutional					3	ī	4
Schizo-Affective	••	••	••	••	7	5	12
Anxiety States	••	••	••	••	18	13	31
Hysteria	••	••	••		18	13	31
Neurotic Depression	••	••	••	••	15	10	25
Obsessionals	••	••	••	••	3	2	5
Miscellaneous	••	••	••	••	17	12	29
					114	86	200

### TABLE I

## Composition of the Sample Rated

TABLE II

<b>Product-Moment</b>	Correlation	Coefficients	Between	th <b>e</b> 35	Compound	Variables

1 2 3 4 5 6 7 8 9 00 111 123 14 15 6 17 8 9 00 111 123 14 15 6 17 8 9 00 212 223 24 5 26 7 8 9 00 313 23 33 33 35	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 9 20 21 22 23	1 2 3 4 5 6 7 8 9 10 11
	$\begin{array}{c} 13 \\ +254 \\ +537 \\ +365 \\ -060 \\ -110 \\ -100 \\ -322 \\ -111 \\ -123 \\ -324 \\ +530 \end{array}$	i
$\begin{array}{c} 25 \\ -410 \\ -250 \\ -310 \\ -032 \\ -040 \\ +238 \\ +346 \\ +217 \\ -054 \\ -290 \\ -167 \\ -1290 \\ -167 \\ -254 \\ -291 \\ -265 \\ +347 \\ +125 \\ +427 \end{array}$	$\begin{array}{r} 14 \\ +314 \\ +125 \\ +062 \\ -020 \\ +071 \\ -058 \\ -135 \\ -366 \\ -002 \\ -276 \\ +099 \\ -057 \end{array}$	2 +670
$\begin{array}{c} 26\\ +110\\ +283\\ +144\\ -355\\ -507\\ -509\\ -059\\ -079\\ -218\\ -265\\ -672\\ +475\\ +269\\ -031\\ -091\\ +029\\ -031\\ -091\\ +029\\ -158\\ 0\\ -144\\ -306\\ +163\\ -080\\ \end{array}$	$\begin{array}{c} 15 \\ +220 \\ +150 \\ +253 \\ +072 \\ +143 \\ +006 \\ -0718 \\ -156 \\ -004 \\ -121 \\ +026 \\ -099 \\ +310 \end{array}$	3 +613 +578
$\begin{array}{c} 27 \\ +218 \\ -027 \\ -330 \\ -4547 \\ -547 \\ -591 \\ -424 \\ -387 \\ -387 \\ -188 \\ -293 \\ -576 \\ -480 \\ -131 \\ -137 \\ -2266 \\ -480 \\ -131 \\ -1527 \\ -2266 \\ -408 \\ +328 \\ +328 \\ +019 \\ +476 \end{array}$	$\begin{array}{c} 16 \\ +189 \\ +097 \\ +402 \\ +119 \\ -005 \\ -001 \\ +056 \\ -036 \\ -003 \\ +140 \\ -123 \\ +140 \\ -139 \\ -117 \\ +006 \end{array}$	4 +049 +070 +347
$\begin{array}{c} 28 \\ -262 \\ -290 \\ -518 \\ -334 \\ -526 \\ -259 \\ +127 \\ +174 \\ +276 \\ -050 \\ -073 \\ +253 \\ -446 \\ -234 \\ -128 \\ +391 \\ +326 \\ +406 \\ +215 \end{array}$	$\begin{array}{c} 17 \\ +312 \\ +244 \\ +305 \\ -0064 \\ -084 \\ -084 \\ -048 \\ -106 \\ -1360 \\ -454 \\ +595 \end{array}$	5 -085 -122 +461 +520
$\begin{array}{c} 29\\ -496\\ -127\\ -304\\ +153\\ +199\\ +281\\ +099\\ +074\\ -026\\ -142\\ -266\\ -142\\ -266\\ -090\\ -027\\ +175\\ -098\\ -071\\ -116\\ 0\\ +179\\ -012\\ +049\\ -463\\ +015\\ -140\\ \end{array}$	$\begin{array}{c} 18\\ +364\\ +092\\ +331\\ +258\\ +177\\ +121\\ +085\\ -093\\ +056\\ -243\\ -100\\ -042\\ +248\\ +347\\ +430\\ +362\end{array}$	6 557 279 +049 +764 +524
$\begin{array}{c} 30\\ +213\\ -371\\ -002\\ -457\\ -331\\ -302\\ -330\\ -198\\ -231\\ +380\\ -231\\ +380\\ -231\\ +080\\ +062\\ -082\\ -0027\\ -104\\ -015\\ -228\\ -115\\ -228\\ -164\\ -115\\ -228\\ -141\\ +084\\ +370\\ -065\\ +085\\ \end{array}$	$\begin{array}{r} 19\\ +262\\ +411\\ +331\\ +059\\ -205\\ -082\\ -043\\ -136\\ +160\\ +149\\ +235\\ +345\\ -095\\ +154\\ \end{array}$	7 504 323 312 +345 +517 +577
$\begin{array}{c} 31 \\ -015 \\ -264 \\ -398 \\ -102 \\ -126 \\ +146 \\ +125 \\ -134 \\ +103 \\ +125 \\ +323 \\ -129 \\ -136 \\ -137 \\ -129 \\ -076 \\ -407 \\ -210 \\ -136 \\ -155 \\ +378 \\ +046 \\ +174 \\ +719 \\ +919 \\ +344 \\ +024 \\ +024 \end{array}$	$\begin{array}{c} 20 \\ -2255 \\ +197 \\ +490 \\ +209 \\ -0555 \\ -121 \\ +073 \\ -126 \\ +0411 \\ -312 \\ -031 \\ +0169 \\ +148 \\ +381 \\ +329 \\ -076 \end{array}$	8 -159 -164 +057 +208 +425 +317 +382
$\begin{array}{c} 32\\ -481\\ -165\\ -443\\ -332\\ -332\\ -332\\ -332\\ -332\\ -332\\ -332\\ -332\\ -130\\ +245\\ +136\\ -120\\ +375\\ -2202\\ -476\\ -120\\ +378\\ -231\\ -076\\ -246\\ -120\\ +378\\ +114\\ +225\\ +152\\ +378\\ +129\\ -083\\ +065\\ \end{array}$	$\begin{array}{c} 21 \\ -325 \\ -397 \\ -424 \\ -113 \\ +324 \\ +039 \\ +167 \\ +6577 \\ -571 \\ -523 \\ -008 \\ -123 \\ +259 \\ -2069 \\ -215 \\ -281 \end{array}$	9 -500 -627 -345 +121 +320 +272 +555 +394
$\begin{array}{r} 33 \\ -282 \\ -295 \\ -449 \\ -175 \\ -111 \\ +161 \\ +281 \\ +202 \\ +242 \\ +202 \\ +224 \\ -041 \\ +289 \\ -428 \\ -428 \\ -428 \\ -428 \\ -428 \\ -421 \\ -034 \\ -068 \\ +197 \\ -034 \\ -275 \\ +753 \\ +079 \\ +099 \\ +212 \\ -095 \\ +212 \\ -095 \\ +212 \\ -095 \\ +212 \\ -433 \\ +236 \\ +436 \end{array}$	$\begin{array}{c} 22\\ -483\\ -475\\ -602\\ +125\\ +004\\ +255\\ +422\\ +018\\ +389\\ +530\\ -496\\ -448\\ +041\\ -033\\ -068\\ +171\\ -094\\ +171\\ -094\\ +706\\ \end{array}$	$10 \\ -331 \\ -400 \\ -341 \\ -018 \\ +190 \\ +224 \\ +501 \\ +270 \\ +468$
$\begin{array}{r} 34 \\ -531 \\ -412 \\ -594 \\ -204 \\ +425 \\ +351 \\ +355 \\ +351 \\ +516 \\ -563 \\ -572 \\ +112 \\ +2267 \\ -124 \\ +573 \\ +273 \\ +471 \\ +150 \\ +273 \\ +471 \\ +150 \\ +273 \\ +275 \\ +275 \\ +276 \\ +575 \\ +276 \\ +496 \\ +608 \end{array}$	$\begin{array}{c} 23 \\ -268 \\ -346 \\ -149 \\ +272 \\ +380 \\ +503 \\ +531 \\ +345 \\ +496 \\ +195 \\ -539 \\ -458 \\ +096 \\ +105 \\ +312 \\ -0182 \\ +068 \\ +172 \\ -132 \\ -0182 \\ +424 \end{array}$	$11 \\ -569 \\ -491 \\ -547 \\ -081 \\ +134 \\ +141 \\ +456 \\ +155 \\ +589 \\ +247$
$\begin{array}{r} 35\\ +618\\ +310\\ -392\\ -592\\ -408\\ -392\\ -269\\ -474\\ +348\\ +244\\ +05\\ +024\\ +170\\ -814\\ +005\\ +024\\ +121\\ +095\\ -203\\ -247\\ -249\\ -354\\ +297\\ +042\\ +297\\ +042\\ +355\\ +073\\ -069\\ -374\\ \end{array}$	$\begin{array}{c} 24 \\ -438 \\ -222 \\ -299 \\ -267 \\ -220 \\ -113 \\ +041 \\ +301 \\ +170 \\ +408 \\ +301 \\ +170 \\ -296 \\ -296 \\ -296 \\ -296 \\ -403 \\ -403 \\ -409 \\ -097 \\ +058 \\ +210 \\ -138 \end{array}$	12 +399 +408 +346 -339 -377 -271 -583 -203 -460 -376

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The next step was to convert the rating for the 246 simple traits into a score on a 5-point scale for the 35 compound variables, by the punched card technique described in detail already (Monro, 1953). Then the product-moment correlation coefficient between each compound variable and every other compound variable was determined, and the results set forth in the usual tabular form, in Table II.

Next, using the technique for deriving trait-groups described earlier (Monro, 1954), the groups formed by positive intercorrelation between the 35 variables were determined. In the first place, a standard of positive intercorrelation of at least 0.500 was required, but it was found impossible to demand this level between each and every variable forming the new groups. However, each variable included in the new groups correlated positively to the extent of 0.500 with at least one other variable in the group, with the exceptions of Groups V and VI where the level required was reduced to plus 0.400 or above.

The number of new groups was found to be twelve. The process of intercorrelation described above for the 35 trait-groups was then repeated between these twelve, and the results set out in tabular form—in Table III.

### TABLE III

#### Product-Moment Correlation Coefficients Between the 12 Newly Derived Syndromes

In this phase, the correlation coefficients were found to be much lower. The highest was plus 0.439, and groups could only be formed by accepting positive correlations above the level of 0.200. In this way, five groups were finally derived.

### CONSIDERATION OF THE RESULTS

The twelve trait-groups derived from the intercorrelation of the 35 compound variables were constituted as set out below. To save space, the compound variables will be denoted by the initials "CV", followed where necessary by a number to indicate its place in the list previously published (Monro, 1954).

Group I, composed of CV's 21, 33, 22, 23, 34, 10 and 32, consisted of the following simple traits:

Hostile, pugnacious, vindictive, slanderous, suspicious, irritable, opinionated, partial, jealous, defensive, obstructive, ungrateful, mulish, tactless, cynical, sarcastic, assertive, argumentative, arrogant, conceited, evasive, extrapunitive, plaintive, egotistical, self-deceiving, deceitful, dishonest, disloyal, acquisitive, ruthless, hard, cruel, rebellious, selfish, tight-fisted, dissatisfied, cold and cowardly.

Group II, composed of CV's 4, 5, 6 and 7, consisted of the following simple traits:

Hearty, optimistic, cheerful, genial, self-confident, vivacious, mirthful, unrepining, enthusiastic, charming, energetic, contented, generous, adaptable, gregarious, curious, frivolous, talkative, boastful, intrusive, hurried, emotionally expressive, impulsive, reckless, mischievous.

Group III, composed of CV's 25, 31, 9, 11 and 24, consisted of the following simple traits:

Coarse, rough, slipshod, confused, forgetful, disordered in thought, phantasying, absent-minded, irresponsible, lax, careless with goods, wandering, conscience-less, easy-going, placid, casual, fickle, undependable, quitting, planless, banal, unintelligent, shiftless and narrow in interests.

Group IV, composed of CV's 1, 2, 3, 35, 12 and 13, consisted of the following simple traits:

Conscientious, responsible, painstaking, reliable, persevering, self-respecting, cautious, serious-minded, deliberate, formal, fair-minded, thrifty, patient, loyal, honest, self-denying, kind, soft-hearted, unresentful, co-operative, reasonable, grateful, natural, tactful, praiseful, affectionate, friendly, frank, inhibited, habit-bound, inflexible, conventional, self-distrusting, self-dissatisfied, submissive, peaceable, gentle-tempered, humble, trustful, tolerant, naïve and unambitious.

Group V, composed of CV's 16, 17, 20 and 18, consisted of the following simple traits:

Hard-headed, shrewd, enterprising, tough, independent, ambitious, decisive, planful, individualistic, worldly, wide in interests, leading, versatile, sociable, and with social interests, polished, alert, poised, clear-thinking, logical, selfcontrolled, modest, witty, thoughtful, having mathematical and verbal aptitude, and technical and theoretical interests as well as originality.

Group VI, composed of CV's 26, 27 and 28, consisted of the following simple traits:

Reserved, taciturn, quiet, shy, self-effacing, listless, inactive, leisurely, humourless, mirthless, cold-hearted, self-sufficient, secretive, unenquiring, awkward.

Group VII, composed of CV 8 only, consisted of the following simple traits:

Amorous, erotic, sensual.

The remainder were also composed of single CV's and were constituted as follows:

Group VIII, CV 14. Fastidious, faddy, pernickety, pedantic.

Group IX, CV 15. Imaginative, with musical and drawing ability, and musical, aesthetic and artistic interests.

Group X, CV 19. Pious, reverent, having religious interests, mystical, idealistic, humanitarian, good-tempered.

Group XI, CV 29. Affected, eager for attention, self-pitying.

Group XII, CV 30. Brooding, gloomy, pessimistic, worrying.

These groups appeared to relate to a sufficiently wide area of behaviour to merit the term "Syndrome" and were given provisional titles as follows:

1. The Anti-Social Syndrome.

2. The Syndrome of Inadequately Controlled Surgency.

3. The Syndrome of Mental Deterioration, Deficiency and Inadequacy.

4. The Syndrome of Emotionally Constricted Extraversion.

5. The Syndrome of Tough, Capable Extraversion.

6. The Syndrome of Introversion and Social Withdrawal.

7. The Amorous, Erotic Syndrome.

8. The Cranky Syndrome.

9. The Imaginative, Aesthetic Syndrome.

10. The Syndrome of Interest in Religion.

1956]

11. The Hysterical Syndrome.

12. The Syndrome of Anxious Depression.

In certain cases, interesting considerations regarding the relationships between these twelve syndromes were afforded by a study of the positive correlations between CV's in different syndromes. These were all less than 0.500, but were nevertheless substantial.

There was a link between the anti-social syndrome and mental deterioration, and also between its hostile, pugnacious, jealous aspect and surgency. There was also a relationship between the forceful verbal expression of surgency and the verbal expression of anti-social attitudes and feelings.

The Syndrome of Emotionally Constricted Extraversion had links with religious interests and practice, and also with Tough, Capable Extraversion. Its more dependent aspects were related to the reserve and social withdrawal of the Sixth Syndrome. The Hysterical Syndrome showed a relationship on the one hand with CV's 34 and 35, and on the other with CV's 7 and 11. This suggests that the hysterical syndrome may have two principal forms, or may occur in two main settings; firstly, with emotional inhibition, plaintiveness and extrapunitive tendencies; and secondly, associated with lability, impulsiveness and casual, undependable ways.

The Syndrome of Anxious Depression had relationships with a conventional, self-distrusting outlook, and with general under-activity.

Although the Syndrome of Introversion and Social Withdrawal had no subsidiary relationships of this kind, its inner structure was interesting. Of its 3 constituent CV's 26 correlates adequately with 27 and 28, but the two latter show a considerably lower positive intercorrelation. This possibly indicates that there are two somewhat distinct aspects of the syndrome, the one relating to depressive under-activity, the other being schizoid in character.

In an attempt to interpret these findings further in a tentative fashion, recourse was had to a comparison with the work of Cattell (1946, 1953) on a normal population. The rating scale from which this enquiry developed was based on Cattell's comprehensive scale, and a comparison of the results at the correlation-cluster stage of development was considered scientifically justifiable by Professor Drever of Edinburgh University (Monro, 1953). Such exact comparison at this further stage of development is not possible, as Cattell proceeded from the correlation-cluster stage to a factor analysis, whereas I have gone on to explore the correlations between correlation clusters. The comparison undertaken here is therefore of necessity limited to a search for fruitful interpretative suggestions.

Cattell (1953, pp. 185 et seq.) gave lists of traits which he considered most characteristic of the 14 bipolar factors he derived from his researches. I compared the lists of traits comprising the twelve syndromes described above with Cattell's lists. Where more than half the traits in one of Cattell's lists were found in a particular syndrome, a major relationship, for the present purpose only, was considered to exist between the appropriate pole of Cattell's factor and that syndrome. Where less than half, but more than a quarter of the traits corresponded in this way, a minor relationship was considered to exist. The actual relationships found were as follows:

Syndrome I showed major relationships with schizothyme frustration, an obstructive withdrawn schizothyme temperament and paranoia. Its minor relationships were with demoralized general emotionality, boorishness, a dominant disposition and tough, rigid, poise.

Syndrome II very strongly resembled Cattell's factor of surgency, and had

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dominant disposition, an outgoing temperament and demoralized general emotionality. Syndrome III related principally to low intelligence and immature

dependency, with minor relationships to boorishness and neurasthenia.

Syndrome IV had the most complex relationships of all, perhaps because it is at the point of overlap of several factors. Its major relationships were with a phlegmatic, frustration-tolerant temperament, a submissive disposition, positive character-integration, charitable adventurous cyclothymia, and cyclothymia per se. Its minor relationships were with an emotionally stable character, intelligence, a trained, socialized, cultured mind, a vigorous obsessional determined character, an outgoing temperament and anxious practicality.

Syndrome V related principally to an emotionally stable character, a trained, socialized, cultured mind and intelligence. Its minor links were with a dominant disposition, positive character integration and an obsessional determined character.

Syndrome VI related principally to melancholic desurgency, and secondarily to an obstructive, withdrawn, schizothymic temperament.

Syndromes VII to X had no relationships at all.

Syndrome XI had a dubious connection with hypersensitive, infantile, sthenic emotionality, and Syndrome XII had a minor relationship with melancholic desurgency.

Broadly speaking, these findings accorded reasonably well with the provisional titles suggested for the twelve syndromes. The relationships of Syndrome VI tended to confirm the finding noted earlier that this syndrome seems to have a depressive and a schizoid facet.

The results of the intercorrelations between the twelve syndromes themselves must be treated extremely tentatively owing to the low level of the correlations. The syndromes of anti-social behaviour, mental deterioration and introversive social withdrawal coalesced to form a loose group. The surgent syndrome likewise formed a general association with hysteria and amatory activity. The Syndrome of emotionally constricted extraversion formed a similar group with anxious depression, and the syndromes concerned with religion and aesthetic interests tended to combine with fastidiousness. Syndrome V, that of tough, capable extraversion, remained unchanged.

Very broadly, the first of these groups seems to denote disorder associated with disintegration of the social capacities, while the second appears to describe illnesses in which social activities and drives persist, but in a distorted form. The third indicates a general relationship between illnesses characterized by depression, anxiety and obsessional tendencies. The fourth group may well relate to an aspect of the capacity for regaining mental health. In this connection Bychowski (1950) points out that, in the treatment of patients with egoic weakness, it is often necessary to help the patient to arrive at a philosophy of life, which may often take the form of allegiance to a traditional body of religious doctrine. He further points out the value in these cases of aesthetic interests and activities, a finding borne out by many clinicians with experience of art or musical therapy. The fifth group relates much more clearly to the potential capacity for recovery. It bears a close resemblance to the qualities described by Barron (1953) as characteristic both of ego-strength and the capacity to respond to psychotherapy.

This enquiry, therefore, arrives at certain broad, tentative generalizations

about the patterns of behaviour shown by the mentally ill. The first of these appears to be the disintegration of socially adjustive behaviour, in which antisocial attitudes and withdrawal from social contacts are conspicuous. The second seems to be characterized by the continuation of attempts to make social contacts, but in a distorted and unrealistic way. The keynote of the third appears to be affective disturbance. The other two patterns denote the presence of the capacity for recovery, even in a population of seriously disordered patients.

### DISCUSSION

This enquiry is an attempt to apply recently developed precision methods to practical problems of psychiatric classification and generalization. The particular technique used is one designed to reveal broad perspectives rather than points of detail; it is analogous to the use of low power microscopy in studying the main features of tissue structure. It has the limitation of being purely cross-sectional, whereas in clinical psychiatry it is essential to know the speed of development of an illness, the circumstances in which it arises and the kind of person in whom it occurs.

It is therefore interesting, perhaps even remarkable, that the findings in this paper should so closely reproduce the principal syndromes described by clinical psychiatry. It is true that Syndrome I above is somewhat broader and more inclusive than the paranoid syndrome, as it includes many schizophrenic features and also certain aspects of aggressive psychopathy, but these relationships are well recognized clinically. Syndrome II does not distinguish between clinically distinct manifestations of surgency, such as mania, schizo-affective states and schizophrenic excitement, nor does Syndrome III differentiate mental deterioration from mental deficiency or certain forms of personality inadequacy. Syndrome IV includes the characteristics of the obsessional in a rather wider setting which seems to embrace the personality characteristics in which such states may arise, while Syndrome XII does not separate anxious depression into its clinically distinct categories. Nevertheless the general picture of the psychiatric scene is eminently recognizable and familiar. To revert to the analogy of microscopy, this study is using a slightly lower power than clinical observation.

It is worth noting, however, that this relative lack of the power to discriminate detail was not shown in my previous Q-Technique study (Monro, 1955). This separated out the paranoid type more exactly, though it included individuals of the paranoid temperament who sought psychiatric advice on account of anxiety. It also differentiated sharply between mania and schizophrenic excitement, while also giving some indication of the validity of the schizo-affective category. There was also a much clearer differentiation between mental deterioration and deficiency. Q-Technique did not bring out the obsessional type as clearly as clinical psychiatry has done, but Type 9 in the former paper has strong affinities with it in a depressive setting. Certain anxiety manifestations were also clearly differentiated from a variety of depressive conditions.

This is further evidence of the useful complementary functions of R- and Q-Techniques. Between them they mirror the clinical scene with remarkable accuracy. It is not yet clear why the two methods should produce these different but complementary results, but these findings give a useful warning of the unwisdom of predicting what a particular statistical tool will accomplish in a field as difficult and complex as clinical psychiatry. It seems that the best way

to find this out is to use the tool, and scrutinize the results in the light of all available knowledge derived from other sources.

Another point of some interest is the sharp drop in the level of the positive correlations when the twelve syndromes described above were intercorrelated. This suggests a profound, though perhaps unwitting agreement between the findings of trait-psychology and clinical psychiatry. Trait-psychology, as used in this enquiry, is concerned with the problem of dealing with the varied manifestations of behaviour in unitary terms, particularly for descriptive purposes. Starting from unitary terms which describe relatively narrow aspects of behaviour, it seeks by the technique of correlation to subsume wider and more varied aspects under single heads. This enquiry has shown the process to be justifiable until areas of behaviour of similar breadth to those embraced by the classical syndromes of psychiatry are reached. The drop after that indicates that the unity underlying yet wider generalizations has become, at best, tenuous. Historically speaking, clinical psychiatry has followed a very similar path. Whether searching for "Disease-Entities", "Reaction Types" or "Diagnostic Categories", it has, in fact, aimed at describing wide areas of behaviour (usually behaviour characteristic of mental disorder) in unitary terms. The term "Mania' is clearly intended to denote a particular set of behavioural manifestations, and to suggest that, with due qualifications, all cases of mania require to be handled and treated in the same sort of way. That clinical psychiatry and trait-psychology agree so closely regarding the width of the areas of behaviour that can be dealt with in unitary terms, is a fact of considerable significance.

These considerations suggest a re-valuation of the critical attitude of clinical psychologists towards psychiatric classification. Eysenck (1952) said that, in statistical terms, the reliability of psychiatric diagnoses is seldom or never above 0.500. He called Kelly's Michigan Study "A devastating comment on, and criticism of the clinical methods of interviewing". Ash (1949) showed that diagnostic agreement may only be reached on 30-40 per cent. of occasions by psychiatrists working under controlled conditions. These contentions require to be taken seriously, but suggest a very different state of affairs to that indicated in this paper. If clinical psychologists go beyond a simple statement of the statistical deficiencies of psychiatrists, and suggest that their own statistical tools can make a better job of psychiatric classification, they would be wise to reflect on the difficulty mentioned above, of forecasting what a particular statistical tool will do in the psychiatric field. Even in the matter of psychiatrists falling short of the requirements of statistics, there are various pertinent considerations. It may well be that the criteria evolved by clinical psychologists have more relevance to the fields of research, vocational guidance, etc., than to the domain of therapy, which is the psychiatrist's principal interest. It is true that psychiatric diagnosis is not standardized; some psychiatrists prefer to be baldly descriptive, others prefer to be interpretative to some degree in their diagnoses. Disagreement, sometimes more apparent than real, may also occur between exponents of different schools. These facts require to be taken into account in order to arrive at the real degree of unreliability of psychiatric diagnosis and of the amount of genuine disagreement between psychiatrists. There is a case for attacking the difficulties of psychiatric classification with precision methods and working towards greater standardization of diagnostic categories, but this paper suggests that clinical psychiatry has done a better job than it is sometimes credited with. There is, beyond all doubt, scope for collaboration between psychiatrists and psychologists, but there must be full respect for each viewpoint.

750

1956]

This discussion can fittingly be ended with a brief consideration of the five broad generalizations evolved above. It is interesting to note that two of the three which denote disordered behaviour patterns lend themselves most easily to formulation in terms of social adaptation, thereby emphasizing the importance of social factors in psychiatry. Finally, the clear emergence of a category resembling ego-strength as described by Barron (1953) is significant. If this concept, derived from a statistical-behaviourist approach, is compared with Bychowski's (1950), derived from psychotherapeutic experience, the implications become even wider. The latter author regards egoic weakness as consisting of a failure of the main functions of the ego, namely, mastery of and adaptation to external and internal reality. The failure of social adaptation shown in two of the broad categories mentioned above suggests a relationship to egoic weakness so conceived. The element of emotional constriction in the third category may relate to some degree of difficulty in dealing with internal reality, and so to egoic weakness. The concept of egoic weakness is thus one with wide ramifications in relation to mental disorder and its further study might well be repaying. Certainly mental hospital psychiatrists are constantly meeting the difficulty of trying to help people whose personalities are so poor that there seems little prospect of success. The fact that some capacity for recovery was so clearly revealed in a sample population of the mentally disordered, gives some ground for hope that, with further study, it may prove possible to cope more successfully with this problem.

#### SUMMARY

1. After an introductory discussion on the problem of generalization in psychiatry, the sample population dealt with was described.

2. Next, the process of scoring this sample on a 5 point scale for 35 variables (compound traits) was described. 3. The product-moment correlation co-efficient between each variable and every other

variable was determined, and the results set out in tabular form.

4. From these data, in accordance with the correlations, twelve groups of variables, or Syndromes, were derived and given provisional titles.

Further relationships between these syndromes were explored in the light of positive correlations between variables falling in different syndromes.
 The intercorrelations between the twelve syndromes were determined, and five broad

categories or generalizations derived from them. It was noted that, at this stage, the level of positive correlations had fallen to a relatively low level.

7. To assist in the interpretation of the twelve syndromes, a comparison was carried out between the findings summarized above, and the factors derived by Cattell from his researches on normal populations.

8. A very tentative interpretation of the five broad categories was put forward.

9. In discussing these results, attention was drawn to the difficulty of predicting what a particular statistical tool will accomplish in the psychiatric field, and the possible complementary functions of R- and Q-Technique were noted. Attention was paid to statistically grounded criticisms of psychiatric classification, and the need for caution and further investigation stressed. Finally, the possible importance of the concept of egoic weakness in relation to the behaviour of the mentally disordered, was noted.

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752