

Earliest Memories And Personality

A Predictive Study

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Introduction

SYSTEMATIC study of first memories and their relationship to personality has been of considerable interest. Such data permit psychodynamic conceptualization while lending themselves to quantitative methods, testable hypotheses, and correlative studies with clinical and other material. Several experimental techniques have been reported for such endeavors and preliminary results, notably those of Levy and Grigg⁶ and myself and my co-workers,⁵ have been favorable. These, and other past studies (see reference 5, where they are reviewed), have demonstrated the validity of earliest memories as reflectors of personality. All, however, utilized essentially *post hoc* techniques; the challenge of predictive research remained. The present study describes an effort to meet this challenge by attempting to predict from first memory content the personality features of a group of 48 subjects. Secondly, it offers additional related data obtained by means of a *post hoc* analysis of the relationship between 62 first memory variables and 76 personality measures. Lastly, it includes a brief study of correlated aspects within the first memory itself.

Briefly, the hypotheses tested in this research come from a conception of first memory recall as a concentrated expression of cognitive style,* in which precipitates of drives; superego promptings; and ego functioning, particularly

defensive operations and modes of adaptation; and the person's view of reality and the self, are to be found. These are reflected in the present personality assessment in terms of items grouped according to motives, defenses, thought processes, inner states, identity, and interpersonal behavior. By conceptualizing the implications of the first memory content in exactly these terms, personality and memory were brought together and the present findings resulted.

Materials and Method

First memories were obtained from 48 men, professional actors between the ages of 21 and 42, who were the subjects of an extensive study of the effects of lysergic acid diethylamide (LSD-25) (see reference 7 for the details of the overall study and assessment procedures). Although subjects were screened to eliminate the obviously psychotic, two subjects were assessed as schizophrenic reactions and ten as showing borderline features; the remaining 36 subjects were on the neurotic-normal continuum. The first memory of each subject was elicited under pretest conditions prior to drug ingestion and again under LSD-25. Only the *pretest* memories are considered in this report.

The first memories were scored on a blind basis separately by two experimenters,† using the method previously described by Langs et al (see reference 5 for details). A consensus was reached on all items where disagreement occurred. From these consensual scores, 60 items were selected for study. Two major groupings of these items were made: (1) *Population Counts*—ten items—direct counts of the persons present in the memory in respect to sex, age, family status, etc, and (2) *Complex and Thematic Items*—50 items—thematic material and other categories of a more complex nature such as roles, perception of the environment, etc. Each item was treated separately and each subject received a score for the presence or absence of the particular item.

The personality assessment consists of a rating of each subject on 142 items referable to the areas of motives, defenses, thought processes, inner states,

† Bert Holland gave assistance.

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*In previous work,^{8,9} this style has been related to other cognitive measures and to the effects of lysergic acid diethylamide (LSD-25).

identity, and interpersonal behavior. Ratings were based on a clinical interview, Rorschach test, Thematic Apperception Test (TAT), Wechsler-Bellevue Test, and an autobiography. The original items were reduced to 93 highly intercorrelated items, of which 76 were selected for the present study.‡

In the *Predictive Study*, overall hypotheses were developed as to the personality implications for each first memory item. From these, specific correlations were predicted and tested. In the subsequent *Exploratory Study*, the correlations between all 60 first memory variables and the 76 personality variables were determined so that the entire relationship between the two could be assessed. At the same time, intercorrelations among the 60 first memory variables themselves were also obtained in an effort to learn what themes and roles tended to appear together within the memories.§

Results

A. *Overall*.—The first question to be answered is: Were more predictions of the personality correlates of the first memory scores borne out than would be expected by chance? A related question follows: Did the Exploratory Study also result in more significant correlations than expected by chance?

The findings indicate an essentially affirmative answer to both questions. In the Predictive Study, a total of 773 personality predictions were made, ranging from 4 to 24 per first memory item, with most items receiving 15 to 20 predictions. A χ^2 -analysis of the 773 predictions made for all 60 first memory scoring categories revealed a significantly greater number of correct predictions than expected by chance alone (eg, at the $P < 0.05$ level: correct by chance=39; actually correct=88. The $\chi^2 = 66.54$; $P < 0.001$). For the 50 complex-thematic items alone, 625 predictions were made and significant results again obtained (eg, at $P < 0.05$:

‡ Reliability and indications of usefulness in previous work were used to select these items. Prior studies have demonstrated the validity of the assessment method through agreement with other personality measures.^{3,7-9}

§ Point-biserial correlations were used throughout the study. Strictly speaking, this method would be valid if all measures were independent of each other. The two sets of ratings are completely independent. The assessment measures, while not completely independent from each other, have low intercorrelations, with a median absolute value of 0.13. The first memory measures were reduced to a set of relatively independent scores, eliminating overlap, and the findings were comparable to those reported here.

chance=31; actual=76. The $\chi^2 = 67.45$; $P < 0.001$). The Exploratory Study included 4,560 intercorrelations and produced equivocal results for all 60 first memory items (ie, at $P < 0.05$: chance=228; actual=248. The $\chi^2 = 2.67$; NS. At $P < 0.01$, however: chance=46; actual=69. The $\chi^2 = 12.13$; $P < 0.01$). For the 3,800 intercorrelations made for the crucial thematic-complex items, significant findings occurred at all levels of significance (eg, at $P < 0.05$: chance=190; actual=226. The $\chi^2 = 7.18$; $P < 0.01$). Thus, we may conclude that there is a significant relationship between first memory and personality, but only when context and roles of persons present are considered.

B. *Specific Findings*.—This section will provide a brief description of the predictive hypotheses used for selected first memory items and the outcome of the specific predictions made. The *post hoc* correlates will also be described, as will the intercorrelations within the first memory variables. The findings will be grouped according to the various first memory categories, and related categories will be placed together.

1. *Illness—Damage—Conflict*: There were eight partially overlapping first memory scoring categories related to themes of direct attack, conflict, illness, and damage (Table 1). The major hypothesis utilized in predicting personality features from these dimensions was that their presence reflected a wide range of problems with aggressive impulses. Specifically, personality correlations were anticipated with a variety of hostile relationships and with self-punitive and depressive trends. Further, it was expected that these subjects would have low self-esteem, poor attitudes towards work and responsibility, homosexual trends, manipulative attitudes, and would use acting out and projection as prominent defenses. As indicated in Table 1, most of these expectations were strongly confirmed.

The major personality correlates that were not predicted for this group of items include identity problems,|| poor defenses, thought disturbances (see Table 2 for details) and tendencies to be narcissistic with fluid affects

|| The item, syntonic identity and set of values (Table 2 and 3) refers both to internally well accepted values and an identity which fits in well with one's environment.

TABLE 1.—Major Personality Correlates for Themes of Attack, Conflict, Damage, and Illness
Predictive Study

Personality Item (abbreviated)	First Memory Themes					
	Subject Attacked, N = 14	Any Attack, N = 20	All Conflictual Themes, N = 14	Direct Conflict Only, N = 10	Illness & Damage, N = 10	Illness & Damage & Conflict N = 14
Hostile relationships		0.20 P	0.28 P	0.25 P		0.20 P
Hostile towards males	0.41 P	0.37 P	0.49 P	0.28 P		0.37 P
Hostile towards females	0.24 P	0.41 P	0.25 P		0.26 P	0.32 P
Aggression pent-up in fantasy		0.20 P				
Anticipates exploitation		0.25 P	0.20 P	0.22 P	0.19 P	0.24 P
Needs to rebel, defy authority	0.30 P	0.37 P	0.28 P			0.26 P
Depression; self-abasement	0.26 P	0.36 P	0.21 P		0.22 P	0.23 P
Self-punitive, disillusioned	0.40 P	0.43 P	0.30 P	0.23 P	0.25 P	0.35 P
Positive attitude towards work & responsibility		-0.29 P	-0.22 P	-0.19 P		
Reasonable amount of self-esteem	-0.31 P	-0.30 P	-0.19 P			
Homosexual trends					0.19 P	
Projection & externalization			0.20 P			0.21 P
Acts out					0.23 P	0.21 P

$r = \pm 0.19$ to ± 0.23 ; $P = < 0.20$, 2 tail.

$r = \pm 0.24$ to ± 0.28 ; $P = < 0.10$, 2 tail.

$r = \pm 0.29$ to ± 0.35 ; $P = < 0.05$, 2 tail.

$r = \pm 0.36$ or more, $P = < 0.01$, 2 tail.

P, item correctly predicted; including direction of correlation.

($r=0.27$)[¶] and tense and restless ($r=0.26$). The presence of aggression pent up in fantasy

[¶] Correlations will be included in the text only for items not presented in the tables. See the legends in the tables for levels of significance and use of "P" and "X" where appropriate.

and conscious heterosexual anxieties supplement the predicted items.

Turning to the correlates of this group of themes within the first memory itself, positive correlations were found for: environment unpredictable, environment both supportive and

TABLE 2.—Major Personality Correlates for Themes of Attack, Conflict, Damage, and Illness
Exploratory Study

Personality Item (abbreviated)	First Memory Themes					
	Subject Attacked, N = 14	Any Attack, N = 20	All Conflictual Themes, N = 14	Direct Conflict Only, N = 10	Illness & Damage, N = 10	Illness & Damage & Conflict N = 14
Defensive & guarded under stress			0.25	0.29		
Fears loss of control over aggression	0.29	0.31	0.44	0.40	0.37	0.38
Goal striving in face of frustration	-0.31	-0.31				
Seeks position of authority	0.25				0.41	0.41
Under stress, defenses fail; becomes disorganized	0.27	0.30				
Thinking inhibited & stimulus bound			0.26	0.38		
Thinking naive		-0.32				-0.25
Identity diffusion & conflict	0.41	0.42			0.21 P	
Syntonic identity & values	-0.43	-0.48	-0.43	-0.40		-0.26
Sees self as realistic, hard boiled			0.25	0.30		
Seeks & enjoys sensuous experiences			0.37	0.29		0.31
Magical undoing	0.33	0.33				
Often experiences thoughts as ego alien	0.32		0.33			
Conscious heterosexual guilt & fear of losing sex controls	0.29		0.24			

$r = \pm 0.19$ to ± 0.23 ; $P = < 0.20$, 2 tail.

$r = \pm 0.24$ to ± 0.28 ; $P = < 0.10$, 2 tail.

$r = \pm 0.29$ to ± 0.35 ; $P = < 0.05$, 2 tail.

$r = \pm 0.36$ or more, $P = < 0.01$, 2 tail.

P, item correctly predicted; including direction of correlation.

TABLE 3.—Major Personality Correlates for Traumatic Themes and Roles

Personality Items (abbreviated)	First Memory Categories					
	Role: Pawn, N=9	Role: Subject Ineffectual N=9	Role: Others Subservient to Subject, N=7	Moral Themes, N=14	Environment Unpredictable, N=9	Environment Supportive & Traumatic, N=11
Experiences diffuse anxiety readily		0.24			0.27	
Hostile relationships	0.27 P		0.33 P			
Hostile towards males	0.43 P	0.28	0.27 P	0.30 P	0.30 P	0.22 X
Hostile towards females	0.27 P	0.27		0.23 P		0.25 X
Aggression pent-up in fantasy			0.21 P			
Anticipates exploitation	0.29 P		0.35 P	0.27 P		
Needs to rebel, defy authority	0.33	0.31		0.30 P	0.25	
Fears loss of control over aggression	0.35				0.30	0.36
Depression; self-abasement				0.28 P		0.41
Self-punitive, disillusioned		0.21 P		0.28 P		
Suggestible & dependent		0.35 P	-0.19 P			
Reasonable amount of self-esteem	-0.20 P	-0.36 P			-0.28	
Homosexual trends		0.33 P			0.28	
Identity diffusion & conflict	0.26				0.40	0.28 X
Syntonic identity & values	-0.30	-0.31	-0.25	-0.34 P	-0.33	
Magical undoing		0.28			0.31	0.35

$r = \pm 0.19$ to ± 0.23 ; $P = < 0.20$, 2 tail.

$r = \pm 0.24$ to ± 0.28 ; $P = < 0.10$, 2 tail.

$r = \pm 0.29$ to ± 0.35 ; $P < 0.05$, 2 tail.

$r = \pm 0.36$ or more, $P = < 0.01$, 2 tail.

P, item correctly predicted; including direction of correlation.

X, item correctly predicted; direction of correlation wrong.

destructive, subject in the role of a pawn, subject in an ineffectual role, and moral themes. Negative correlations were with voyeuristic themes and with the absence of interaction (ie, interaction and trauma correlated positively). Illness, damage, conflict, and the intramemory correlates just described all tended to intercorrelate strongly; these items will therefore be referred to collectively as the "traumatic grouping" in subsequent sections.

2. Role: Pawn of Others ($N=9$): This is the first of six categories broadly related to the first group of items (Table 3). In eight of the nine instances, it was the subject himself who was portrayed as a pawn. On this basis, the predictive hypotheses centered around weak relationships with others, a broad range of problems with aggression and a passive, dependent, masochistic orientation. The findings (Table 3) confirm that these subjects have hostile relationships on many levels, but the prediction of a passive-masochistic orientation was not supported. In the Exploratory Study, problems with identity were notable, as was low self-esteem. These subjects are also not naive in their thinking ($r = -0.25$) and do not use regression and childishness as important defenses ($r = -0.26$).

Correlated aspects of the first memory include the "traumatic grouping" and both poor contact with reality and poor logic in reporting the memory.

3. Role for Subject: Ineffectual ($N=9$): This category refers to indications of helplessness and inadequacy of all types. The expectation was that this role directly reflected both the subject's self-image and his way of relating himself to others. Specific predictions, therefore, were made for indications of dependency, depression, masochism, inadequacy, and low self-esteem. The findings support these expectations and include ratings for masochism and lack of self-assertive trends ($r = 0.29$, P), self-punitive attitudes, homosexual trends, dependency, and low self-esteem (Table 3). Further, these persons lack positive attitudes towards work ($r = -0.38$) and fail to strive for goals when frustrated ($r = -0.35$, P).

The additional exploratory findings extend this picture. These subjects have a wide range of problems with aggressive impulses (Table 3). They also show a fluidity of affect ($r = 0.35$), tend to experience diffuse anxiety readily, and their defenses tend to fail under stress ($r = 0.31$). They show proneness to primary process intrusions ($r = 0.29$), conscious

heterosexual guilt and anxiety ($r=0.32$), and they lack a syntonic identity ($r=-0.31$).

Correlated aspects of the first memory were the "traumatic grouping" and direct references to the body, usually referring to illness.

4. Role: Others Subservient to the Subject ($N=7$): It was expected that this role also would reflect the person's self-image and means of relating himself to others. In keeping with this, problems with hostility, exhibitionism, and authoritarian attitudes were expected. The findings indicate the problem with hostile impulses is broad, and includes the subject's frequent anticipation of exploitation by others (Table 3). Further, these subjects do tend to be exhibitionistic ($r=0.21$, P) and not dependent or suggestible. Exploratory findings include a lack of a syntonic identity ($r=-0.25$), the use of projection as an important defense ($r=0.26$), the presence of an unconscious body image of being damaged ($r=0.28$) and the absence of well-modulated affect ($r=-0.31$).

This item had few correlates among the first memory variables. Included were themes related to the subject's receiving care from an environment judged as friendly and a negative correlation with the subject in a passive role. Thus, care appears when others are subservient to the subject.

5. Moral Themes ($N=14$): References to punishment, religion, and morality in the first memory were viewed in terms of superego concepts and postulated to reflect concern with handling one's aggression, and to indicate self-punitive and depressive trends. Passive dependent leanings and identity confusion were also expected. As Table 3 shows, these predictions were strongly confirmed. Supplementary findings indicate that these subjects show passive-aggressive trends ($r=0.25$), thinking which is stereotyped ($r=0.35$) and inhibited or stimulus-bound ($r=0.47$), and that they do not use intellectualization as a notable defense ($r=-0.30$).

Correlations within the realm of the first memory were confined to the "traumatic grouping."

6. Environment Unpredictable ($N=9$): This item was scored for indications of the unexpected which were usually traumatic in nature. Predictions again revolved around the aggressive items in the personality assessment, with

additional expectations of the use of projection and acting out as common defenses. The findings confirm the difficulties with aggression, including the fear of losing control over aggressive impulses, but not the anticipated defenses (Table 3).

The results of the Exploratory Study expand the view of these subjects. They tend to experience diffuse anxiety readily, have problems with their identity, show homosexual trends, and are low in self-esteem (Table 3). There is a strong correlation with submitting to maternal figures ($r=0.52$); heterosexual guilt and the fear of losing control over heterosexual impulses ($r=0.25$) are also found. Other trends include the use of undoing as a key defense, a proneness to ruminative thinking ($r=0.36$), and a lack of both somatization of conflicts ($r=-0.25$) and sensitivity to challenge and threat ($r=-0.31$).

In addition to the expected correlates within the first memory with the "traumatic grouping," positive correlations were found with: travel with others, poor reality contact, and poor logic.

7. Environment Both Supportive and Traumatic ($N=11$): The appearance within the first memory of both support and trauma led to hypotheses that the support factor would predominate in contrast to those memories where no support appeared. Thus, little aggressive conflict, a strong sense of identity and feelings of relative independence from others were expected. Such did not prove to be the case and the traumatic element prevailed so that all predicted correlates were opposite to the direction postulated. Thus, these subjects were assessed as having aggressive conflicts, as being depressed and self-abasing, and as having identity conflicts (Table 3). They also tend to be tense and restless ($r=0.26$), inhibited and overcontrolled ($r=0.25$) and lacking in social poise ($r=0.26$). They do, however, tend to identify with authority figures ($r=0.26$).

Correlated aspects of the first memory included the "traumatic grouping," sexual themes, and poor logic. Negative correlations were with the items, environment judged to be friendly or neutral and the subject in a childish role.

8. Role: Subject Childish, Infantile ($N=15$): A childish, infantile role in the first memory was hypothesized to reflect the person's self-image and way of relating himself to others.

It therefore was expected to correlate with a relative lack of aggressive, demanding behavior; with a dependent orientation and homosexual trends; and with the use of regression as a prominent defense. Secondly, possible depressive and exhibitionistic overtones were considered.

This item was correlated with many variables of personality. These subjects were, in fact, rated as not hostile in their relationships in general ($r = -0.21, P$), nor towards male figures in particular ($r = -0.31, P$), and as not anticipating exploitation ($r = -0.24, P$). Further, they do not fear losing control over aggressive impulses ($r = -0.33$) and are not oversensitive to challenge and threat ($r = -0.28$). They tend to be dependent ($r = 0.30, P$), overtly homosexual ($r = 0.25, P$), and prone to use regression and childishness as an important defense ($r = 0.25, P$). They lack positive attitudes towards work and responsibility ($r = -0.34$), do not strive for goals when frustrated ($r = -0.31$), are passive and use passive resistances ($r = 0.40$), do not seek or identify themselves with positions of authority ($r = -0.26$), and are suggestible ($r = 0.36$). They show a narrow range of interests ($r = 0.40$) and naivete in their thinking ($r = 0.40$), lack both social poise ($r = -0.26$) and common sense ($r = -0.25$), and often use denial as a defense ($r = 0.26$). They do not seek creative outlets ($r = -0.35$) but rather, when frustrated, seek substitutions in fantasy ($r = 0.26$). Contrary to prediction, however, these persons are not depressed or self-abasing ($r = -0.23, x$).

Within the realm of the first memory, this role went along with the subject's being passive, voyeuristic themes, and indications of a friendly environment. It correlated negatively with anal derivatives, indications of conflict, oral themes, and poor logic.

9. Interaction Absent for Subject ($N=18$): The memories were rated for the extent to which the subject interacted with others. The rating of *absence* of interaction was selected for study. It was hypothesized that such subjects would be essentially withdrawn and highly guarded, and therefore depressed, defensive, and inhibited, not exhibitionistic nor likely to strive for goals or seek creative outlets, and yet not overtly hostile. Only the last of these

was borne out: the assessment correlates indicate that these persons are not likely to have hostile relationships ($r = -0.29, P$), nor openly resent other men ($r = -0.34, P$). They are, however, significantly *not* withdrawn nor likely to have weak relationships with people ($r = -0.27, x$), and are also not defensive ($r = -0.22, x$), not overcontrolled ($r = -0.28, x$), and not depressed or self-abasing ($r = -0.25, x$). Further, these subjects have strong, syntonic identities and values ($r = 0.25$) and lack identity diffusion and conflict ($r = -0.27$). They have a positive attitude towards work ($r = 0.22, x$) and their affect is well modulated ($r = 0.27$). Other attributes they lack include passive aggression ($r = -0.25$), rebelliousness ($r = -0.28$), fears of losing control over aggressive impulses ($r = -0.24$), self-punitive attitudes ($r = -0.34$) and seeing one's self as unloved ($r = -0.24$), an unconscious body image of being damaged ($r = -0.25$), and the frequent use of the defenses of reaction formation ($r = -0.24$) and undoing ($r = -0.32$).

Thus, it appears that subjects who did not interact with others within their first memories, rather than showing poor functioning in their current life, actually manage well. The many correlates within the first memory seem to clarify why this is so. Positively correlated were the absence of others in the memory, the environment judged as neutral and the subject in an active role. Negative correlates included the "traumatic grouping," body references, sexual themes, themes of travel, and indications of an unpredictable environment. Thus, interaction and trauma go together.

10. Travel and References to Vehicles: Themes of travel were scored for the patient in the company of others and separately for all references to travel. References to vehicles included cars and trains, and also toy cars, tricycles, and related items. In the Predictive Study, themes of traveling with others were considered to have two contradictory implications: first, an ability to relate oneself well to others; and second, in light of the separation implied, problems with hostility and depression. A tie between travel and acting out was also expected. Vehicles were also considered in their phallic symbolic aspects and additional correlates with narcissism and exhibitionism were anticipated.

The fact that many vehicles were toys and therefore diminutive in nature was overlooked at the time.

The findings indicate that references to traveling with others was correlated with a tendency to be withdrawn ($r=0.31, x$), bland and uncommunicative ($r=0.48, x$), inhibited and over-controlled ($r=0.35$), passive ($r=0.24$), and not to act out ($r=-0.45, x$). Further, such persons are not narcissistic with fluid affects ($r=-0.27$), do not tend to be elated ($r=-0.29$) nor exhibitionistic ($r=-0.29$), and are not hostile towards women ($r=-0.20, x$). Lastly, they lack a sensitive, creative identity ($r=-0.32$).

Correlates for all travel themes include again blandness ($r=0.40$) and absence of acting out tendencies ($r=-0.32, x$), and also an unconscious body image of being damaged ($r=0.25$), lack of anger with oneself ($r=-0.24$) and the use of undoing as a common defense ($r=0.29$).

Correlates of vehicles also include a series of items related to blandness ($r=0.50$), inhibitedness ($r=0.37$), a narrow range of interests ($r=0.30$) and naivete in thinking ($r=0.29$). These persons also are not narcissistic with fluid affects ($r=-0.34, x$), nor often elated ($r=-0.28$) or flamboyant ($r=-0.32$). Further, they are low on depressive tendencies ($r=-0.29, x$); low on hostility towards themselves ($r=-0.28$) and towards others (men, $r=-0.25, x$; women, $r=-0.26, x$); and low on sensitive identity ($r=-0.25$), seeking creative outlets ($r=-0.40$) and introspective trends ($r=-0.34$).

In summary, persons with travel themes tend to be guarded and noncommunicative, to lack acting out tendencies as well as hostility towards themselves and others, and further, to lack a sensitive identity and creative trends.

Travel themes were accompanied within the memory by interaction, separation themes, and anal derivatives. References to vehicles were associated with the subject's being in a childish role and voyeuristic themes; they were negatively associated with body references and themes of attack or moral concern.

11. Separation-Loss ($N=17$): Themes of separation and loss were expected to correlate with aggressive trends, demanding and manipu-

lative attitudes, and depressive and masochistic tendencies. Confirmation of all but the latter was found in that these subjects were assessed as hostile towards men ($r=0.25, P$), anticipating exploitation by others ($r=0.27, P$), having considerable aggression pent up in fantasy ($r=0.20, P$) and as demanding and manipulative in their relationships ($r=0.25, P$). They are both passively aggressive ($r=0.26$) and openly rebellious ($r=0.31$). In addition, their defenses tend to fail under stress ($r=0.25$) and they often experience thoughts and impulses as ego alien ($r=0.26$). They are also introspective and alert ($r=0.25$) and likely to seek out sensuous experiences ($r=0.25$).

Intramemory correlates were with themes of conflict, travel, and care.

12. Direct References to the Body ($N=10$): Mention of the head and mouth predominated in this group. The hypothesis developed was that such references would reflect bodily concern and an impaired body image. As a result, personality correlates were expected to revolve around a narcissistic orientation with depressive, dependent, and masochistic attitudes. Homosexual trends and exhibitionism were expected, as were indications of hostility toward others.

The findings are limited by the fact that the personality assessment included only two items directly referable to bodily concerns. While these subjects do have an unconscious body image of being impaired ($r=0.27, P$), the remaining significant correlates were all opposite to prediction. These subjects tend not to be exhibitionistic ($r=-0.19, x$) nor hostile in their relationships ($r=-0.20, x$) or expectations ($r=-0.23, x$). They are also neither inhibited ($r=-0.19, x$) nor counterphobic or hypomanic ($r=-0.24$) and lack a creative identity ($r=-0.25$), adequate self-esteem ($r=-0.25$) and skill in analyzing problems ($r=-0.25$). Lastly, they do not often use denial as a defense ($r=-0.33$) and are not sensitive to challenge and threat ($r=-0.28$).

Correlates of body references with other features of the first memory are of interest in the light of the assessment findings. They included strong negative correlations with the absence of interaction for the subject and with the environment judged as neutral. There were strong posi-

tive correlations with the subject in a passive role and in an inadequate role, themes of attack and harm, sexual themes, and poor reality contact. Thus, the manifest memory itself reflected passivity, inadequacy and aggression.

13. Pleasant and Positive Themes: Scoring items for the first memory which are of a pleasant or positive tone include references to nature ($N=11$), indications of a friendly and supportive environment ($N=20$), references to happy occasions ($N=6$), themes of care and support ($N=20$; in this group, the subject was always the recipient), and a composite score for all pleasant themes ($N=34$). These aspects did not prove homogeneous, and except for the references to happy occasions (eg, birthdays and holidays), did not correlate extensively with the personality assessment.

Predictive hypotheses for these items centered around two contradictory concepts. The first was that such first memories reflect a positive view of the early and current environment which was (and is now) truly supportive. This led to expectations of personality assessment findings of minimal aggressive conflict; little masochism, depression, and passivity (although, since many of these themes include the subject in a childish role, this expectation was open to question); inclinations to strive for goals and be creative; and trends towards adequate self-esteem and a strong identity. The second concept used was that such pleasant memories are essentially the product of defense, notably denial which is used to obliterate the recall of early traumas. In keeping with this trend away from remembering, acting out was anticipated. Further, the use of such a primitive defense suggested poor handling of aggressive and other impulses.

Most of the findings support the second concept. Thus, the composite score for all pleasant themes had only two correlates with the personality variables: the need to rebel ($r=0.35, x$) and the use of acting out as a defense ($r=0.33, P$). Both are in keeping with the second concept.

Scores for environment perceived as friendly and supportive had five correlates: denial ($r=0.20, P$), absence of both depression ($r=-0.25, P$) and manifest anxiety ($r=-0.35$), a lack of searching for creative outlets ($r=-0.20, x$);

and passive trends including passive resistance ($r=0.29$). A mixed picture compatible with both concepts seems to emerge.

References to happy occasions had 16 personality correlates despite its low N . The emerging picture runs counter to the first concept: these subjects are passive ($r=0.27, x$), dependent ($r=0.32$), and tend to regress under stress ($r=0.35$); they do not identify with authority figures ($r=-0.26$), do not have adequate self-esteem ($r=-0.21, x$), and are neither intellectual ($r=-0.34, x$) nor creative ($r=-0.30, x$). They have a narrow range of interests ($r=0.31$), are not prone to accept responsibility ($r=-0.27, x$) and show loose thinking ($r=0.26$), but are neither grossly anxious ($r=-0.24$) nor overcontrolled ($r=-0.34$). They do, however, frequently use acting out as a defense ($r=0.19, P$). Thus, these subjects are infantile in their self-image and relationships with others and tend to be passive.

The personality correlates for the item, subject receiving care or support from others, also ran contrary to the first set of expectations. These persons were rated as needing to rebel against authority ($r=0.37$) and as anticipating exploitation by others ($r=0.19, x$). They show ruminative thinking ($r=0.24$), are lacking in conventional attitudes ($r=-0.26$), and do not have a narrow range of interests ($r=-0.30$). They do not use acting out as a notable defense ($r=-0.24$), but are self-assertive and not masochistic ($r=-0.22, P$).

References to nature in the first memory (eg, sun, trees, park) were found to have a specific implication different from the rest of this group of items. It appears that such references come from persons who are creative and constructive and for this reason, the findings are more compatible with the first concept. Thus, these persons were assessed as creative ($r=0.22, P$), intellectual ($r=0.25, P$), not masochistic nor self-punitive ($r=-0.24, P$), and as having positive attitudes towards work and responsibility ($r=0.25, P$). They are also not stereotyped in their thinking ($r=-0.33$), not orderly ($r=-0.40$), and do not have a narrow range of interests ($r=-0.34$).

To briefly summarize the intramemory correlates for these items, incidents of happy occasions went with a childish role for the subject, poor reality contact, direct bodily references,

and presence of interaction. These correlates further support the assessment findings of childish-regressive trends in these subjects.

Indications of a supportive environment went along with themes of care, subject in a childish role, activity in others, and absence of illness and damage. It also correlated negatively with poor logic. The specific item of the patient receiving care correlated within the memory only with themes of loss and separation. This relationship may clarify the mistrustful attitudes seen in the assessment of these subjects. The difficulty in finding personality correlates for the composite of all pleasant themes is also clarified somewhat by the correlates for this item within the first memory: positive correlations included moral themes and references to attack.

References to nature correlated with sexual themes. It correlated negatively with references to vehicles, moral themes, and the subject in a childish role.

14. Poor Reality Contact ($N=17$): The first memories were rated for the likelihood that the memory referred to an actual event (including considerations of bizarreness). The few predictions made for this item reflected expectations that subjects with unrealistic first memories would have regressive traits and therefore be subject to primary-process intrusions and inferential thinking; this was confirmed ($r=0.25$, P). Further expectations that these subjects would be withdrawn, narcissistic, and prone to use regression as a defense were not borne out, however. The actual additional correlates center instead around obsessive and aggressive features, and manifest anxiety. Thus, the correlates indicate that these subjects are inhibited ($r=0.33$), conventional ($r=0.33$), ruminative ($r=0.45$), introspective ($r=0.25$), and orderly ($r=0.26$). They are also prone to conscious anxiety ($r=0.26$), show identity diffusion and conflict ($r=0.32$), fear losing control over aggressive impulses ($r=0.31$), and tend to experience thoughts and impulses as ego alien ($r=0.26$). Denial ($r=-0.28$) and regression ($r=-0.25$, x) are seldom used by them as defenses. It would appear, then, that these subjects do show a wide range of disturbances, although most were not predicted.

Among the memory variables, correlates were with themes of attack and illness, the subject in the role of a pawn of others, the subject not

in an active role, and indications of an unpredictable environment. Other correlates included poor logic, indications of an ambiguous or strange environment, and direct references to the body.

15. Poor Logic ($N=25$): First memories were rated for connectedness and coherence in telling. Subjects with poor logic were expected to show regressive traits and therefore to be narcissistic with loose thinking, to have a poor sense of identity, to regress easily, and to lack the trait or orderliness. The results confirm only the poor sense of identity ($r=0.28$, P). Orderliness was actually rated as present in these subjects ($r=0.26$, x), as was the use of undoing as a defense ($r=0.33$). They are, however, ruminative in their thinking ($r=0.25$). Other personality correlates are those of depression and self-abasement ($r=0.25$), masochism and lack of self-assertiveness ($r=0.29$), and a tendency to be angry with themselves ($r=0.26$). These subjects also lack social poise ($r=0.43$), are often anxious ($r=0.37$), and do not use projection as a prominent defense ($r=-0.30$).

Most notable of the intramemory correlates were with themes of attack, illness, and damage, particularly with the subject as recipient or in the role of a pawn. As noted, poor logic also correlated with poor reality contact.

16. Oral Themes: Oral themes considered here include references to talking ($N=8$); all uses of the mouth, including talking ($N=17$); and nonbodily themes related to the oral zone (food, kitchen, etc; $N=17$). The predictive hypotheses utilized were that such references indicate oral aggression and demandingness, dependency, and passivity. The findings, however, tend to run counter to these predictions. There was, in addition, little overlap among the personality correlates of these three items and a clear picture does not emerge.

Persons with references to talking in their first memories show hostility towards men ($r=0.35$, P) and fear of losing control over aggression ($r=0.25$, P). They tend to strive for goals in face of frustration ($r=0.27$) but lack orderliness and thrift ($r=-0.29$). Contrary to prediction, they were not dependent ($r=-0.19$, x).

References to all uses of the mouth correlated with a proneness for elated moods ($r=0.30$).

Further, it correlated negatively with guardedness ($r=-0.28$) and inhibited behavior and thought ($r=-0.34$), passivity and dependency ($r=-0.30, x$), and use of denial as a notable defense ($r=-0.38$). Positive correlates were with somatization ($r=0.28$), tending to seek creative outlets ($r=0.25$), and conflict over homosexual fantasies and behavior ($r=0.24$).

Positive personality correlates of oral derivatives include: tending to submit to paternal figures ($r=0.28$), homosexual trends ($r=0.22, P$) with conscious conflict over these trends ($r=0.31$), and ruminative thinking ($r=0.27$). On the other hand, these subjects are not rebellious ($r=-0.29$), not sensitive to challenge or threat ($r=-0.28$), and not manipulative or demanding of others ($r=-0.30, x$). They also seldom use denial ($r=-0.36$) or reaction formation ($r=-0.30$) as defenses, and their defenses do not tend to fail under stress ($r=-0.29$).

Within the memory, talking went primarily with themes of attack and damage. All uses of the mouth correlated with illness and damage themes and subject in a passive role; it correlated negatively with subject in a childish role. Lastly, oral derivatives went with poor logic and an absence of voyeuristic themes.

17. Anal Derivatives ($N=15$): First memory content included under anal derivatives were references to cleanliness, dirt, thrift, and money. Predictions of personality correlates centered around the notion of the anal character: demandingness and hostility, thrift, and the use of isolation and intellectualization as defenses.

The few personality correlates of this item tend to support the predictive hypotheses. These subjects were rated as anticipating exploitation ($r=0.28, P$) and as having hostile relationships in general ($r=0.23, P$) and with men in particular ($r=0.22, P$); they show, however, little aggression pent up in fantasy ($r=-0.24, x$). They analyze problems skillfully ($r=0.34$), are intellectual ($r=0.24, P$), are flamboyant in thought and language ($r=0.41$), and use both intellectualization ($r=0.24, P$) and isolation as defenses ($r=0.40, P$). They are also passive ($r=0.26$), do not tend to act out ($r=-0.37$), and lack a syntonic identity ($r=-0.27$).

Within the memory, these derivatives went with themes of travel, conflict, poor logic, and

poor reality contact, but not with subject in a childish role.

18. Sexual Themes ($N=12$): For this sample, almost all of the sexual themes were indirect (references to bedroom, dancing, etc), and included involvement with both men and women. It was expected that these subjects would be notable for sexual anxiety, which would then be reflected in homosexual trends and conflicts, and in weak relationships with others. These two specific predictions were confirmed ($r=0.30, P$ and $0.27, P$, respectively). Anticipated exhibitionistic trends were not found. Other correlates include a tendency to seek creative outlets for understanding ($r=0.26$), and negative correlations with the use of denial as a prominent defense ($r=-0.39$), and with being concrete and stereotyped in one's fantasies ($r=-0.24$).

19. Absence of Active Persons ($N=5$): The inhibited passive outlook expected from this item was confirmed in part by a negative correlation with acting out ($r=-0.23, P$), but inhibition and overcontrol as a specific personality trait is lacking in these subjects ($r=-0.23, x$). Exploratory positive correlations are with heterosexual trends ($r=0.24$) and an absence of heterosexual anxiety and guilt ($r=-0.25$). These subjects are also clear in their thinking ($r=0.26$) and show good common sense and judgment ($r=0.25$). Negatively related are anticipation of exploitation ($r=-0.31$), use of passive aggression ($r=-0.29$), failure of defenses under stress ($r=-0.24$), and indications of primary process intrusions ($r=-0.21$). Thus, positive personality features predominate.

Correlates within the attributes of the first memory were: absence of others, subject in a passive role, and a negative correlation with supportive environment.

20. Subject's Role: Passive ($N=13$): This item had few correlates. Anticipated were passive-dependent trends and low scores for hostility. These predictions were supported by negative correlations with manipulative and demanding attitudes ($r=-0.31, P$), aggression pent up in fantasy ($r=-0.20, P$), and anticipation of exploitation by others ($r=-0.28, P$). These subjects do not, however, tend to submit to paternal figures ($r=-0.25$).

Within the memory, positive correlations were with the subject in a childish role, direct

body references, and the presence of women. Negative correlations were with poor logic, the absence of voyeuristic themes, and the environment seen as subservient to the subject.

21. Subject's Role: Active ($N=13$): Predictively, such persons were expected to be assessed as active, demanding, hostile, and constructive. This picture was supported through personality correlations with being manipulative and demanding in relationships ($r=0.44, P$), not being inhibited or overcontrolled ($r=-0.31, P$), acting out ($r=0.31, P$), and anticipating exploitation by others ($r=0.26$). These subjects were also rated as greedy ($r=0.24$), seeing themselves as realistic and hardboiled ($r=0.27$), and as seldom using intellectualization as a defense ($r=-0.27$). They do, however, tend to submit to paternal figures ($r=0.27$).

No intramemory correlates of consequence appeared for this item.

22. Absence of Voyeuristic Themes ($N=11$): Since most subjects in this group had voyeuristic themes in their first memories, it was expected that those subjects who lacked such references would be aggressive, inhibited, and depressed. The assessment was confirmatory in that such subjects are hostile towards women ($r=0.25, P$), anticipate exploitation by others ($r=0.20, P$), and fear loss of control over aggressive impulses ($r=0.26$). In addition, they are not tense or restless ($r=-0.26$) and they do not find it necessary to reassure themselves constantly ($r=-0.25$). They also tend to submit to paternal figures ($r=0.37$) and to seek out sensuous experiences ($r=0.24$).

Within the realm of the first memory, this item correlated positively with the "traumatic grouping," and negatively with subject in a childish role and in a passive role.

23. References to Water ($N=8$): Water was considered symbolically as related to birth, separation, and death. The predicted correlation with depressive trends was confirmed ($r=0.20, P$). Further, persons with this content show a readiness for anxiety ($r=0.32$) and failure of defenses under stress ($r=0.39$). They are also hostile towards women ($r=0.27$), anticipate exploitation ($r=0.44$), and do not often use projection as a defense ($r=-0.32$).

Intramemory correlates were with themes of loss-separation and attack, poor logic, anal

derivatives, an absence of voyeuristic themes, and subject in the role of a pawn but not in a childish role.

24. Use of Extremities: A series of first memory scores referred to the use of the upper and lower extremities. Although a number of correlates emerged, particularly referable to acting out, manipulative and hostile trends, the entire category appeared too heterogeneous for meaningful discussion. Further details of the findings will therefore be omitted.

Comment

The specialized nature of the sample of subjects (male actors) justifiably poses questions as to the validity of the specific findings for the general population. In this connection, it is of interest that the predictions were made using clinical intuition based largely on previous work with the first memories of hospitalized women.⁵ Further, the main thesis of this report lies not in the specific findings, which must be subjected to confirmation, but in the general hypothesis that the manifest content of the first memory is predictive of, and has a broad relationship to, personality. This hypothesis appears strongly confirmed.

In regard to the particular method of scoring first memories used in this research,⁵ the study of the intercorrelations among rated attributes of the first memory brought to light explanations for some of the paradoxical findings, particularly in terms of the limitations of scoring certain categories without contextual considerations. Thus, the correlation between the absence of interaction in the memory and an apparently strong personality picture can be understood only in the context of the strong intramemory correlation between the presence of interaction and traumatic experiences. A review of our own previously reported data⁵ also revealed a similar, but initially overlooked, intramemory correlation. Further exploration of this and other trends is planned, along with appropriate modifications in the present Scoring Manual.

The limitations which follow from the use of manifest content alone are a matter for speculation in the absence of the necessary systematic data.⁵ Certainly, without associative comments, the idiosyncratic aspects of the memory, such as the special significance of a given person, cannot be understood. Another limitation which has

been discussed in this context also pertains in principle to work with manifest dream content. It has been pointed out by Freud,¹ Greenacre,⁴ and others⁵ that the latent, unconscious content is screened out by the manifest content so that deeper drives, conflicts, and anxieties are concealed. Two considerations may clarify this problem. First, the manner in which a person screens his deeper stirrings is of considerable importance and will reflect a variety of ego functions and superego promptings. Second, the screen is not opaque. As Freud first stated for screen memories,¹ and later for manifest dreams,² the earliest memory is a compromise similar to a symptom. It therefore, speaking structurally, reflects contributions from id, ego, and superego; speaking dynamically, it is a compromise between drive and defense. To state this point in still another way, the manifest content is a derivative of the latent content, not an unrelated mask. Thus, while neither the specific latent content of the memory, nor the work comparable to the dream work (the "memory work") is available to studies such as this, there remains for exploration a highly condensed precipitate which extensively reflects personality at all levels of organization. Work with manifest dream content⁵ supports similar considerations. Thus, while manifest content does not provide the rich personal nuances essential in the therapeutic situation, it does provide a precise and measurable datum for microscopic research. Systematic studies of the memories of patients in psychoanalytic treatment can add to work such as this by clarifying what remains concealed and most disguised beneath these screens. Further, they can clarify the genetic aspects of first memory development and bring to light the "memory work" which led to the final form of the conscious memory. A total metapsychological conception of the first memory, including its place in the psychic economy, could then follow.[#]

Summary

Using 60 scores derived from the first memories of 48 male actors, predictions of per-

[#] Arlow and Brenner, in a book which appeared after this manuscript was prepared,¹⁰ offer a thoroughgoing presentation of dream formation from the structural point of view. This discussion is consonant with the views presented briefly here.

sonality were made and tested on an independent assessment of 76 personality measures. All correlations between the two sets of variables were subsequently explored. A significant relationship between first memory and personality was found. First memory scores included, among others, themes such as conflict, illness, pleasant occasions, references to the body and loss-separation; the image and role of persons; the view of the environment and reaction to it; and the extent of interaction. Personality measures referred to motives, defenses, thought processes, inner states, identity, and interpersonal behavior. The specific personality correlates for selected first memory scores were described. Discussion centered on the role of studies of manifest memory content in psychoanalytic research and theory.

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