

- RAINEY, L. C. (1985). Effects of preparatory patient education for radiation oncology patients. *Cancer*, 56, 1056-1061.
- REDD, W. H., & ANDRYKOWSKI, M. A. (1982). Behavioral intervention in cancer treatment: Controlling aversion reactions to chemotherapy. *Journal of Consulting and Clinical Psychology*, 50, 1018-1029.
- RUSSELL, R. K., & SIPICH, J. F. (1973). Cue-controlled relaxation in the treatment of test anxiety. *Journal of Behavioral Therapy and Experimental Psychiatry*, 4, 47-49.
- RUSSELL, R. K., & SIPICH, J. F. (1974). Treatment of test anxiety by cue-controlled relaxation. *Behavior Therapy*, 5, 673-676.
- WOLPE, J. (1958). *Psychotherapy by reciprocal inhibition*. Stanford, CA: Stanford University Press.
- ZEMORE, R. (1975). Systematic desensitization as a method of teaching a general anxiety-reducing skill. *Journal of Consulting and Clinical Psychology*, 43, 157-161.

THE RORSCHACH AND THE DSM-III-R ANTISOCIAL PERSONALITY: A TRIBUTE TO ROBERT LINDNER

CARL B. GACONO

*Atascadero State Hospital
Atascadero, California*

J. REID MELOY

*University of California
San Diego, California*

This study utilized the Rorschach as a psychometric measure for understanding Antisocial Personality Disorder (American Psychiatric Association, 1987). Comprehensive System (Exner, 1986) Rorschach data for a sample of 60 APD subjects and Rorschach object relations and defensive operations for 22 psychopathic APD (P-APD) and 21 nonpsychopathic APD (NP-APD) subjects are presented and discussed. The data support the absence of anxiety and attachment and the presence of pathological narcissism and borderline personality organization in P-APDs. The Rorschach's ability to differentiate antisocial groups based on level of psychopathy (Hare, 1980, 1985) strongly supports the need to use psychopathy as an independent measure when one is studying APD.

Although Rorschach presented a variety of diagnostic groups in his discussions and case examples, including 20 individuals thought to be psychopathic, he had little to say about the psychopath (Rorschach, 1942). As noted by Lindner (1943), early authors who studied psychopathy utilized Rorschach structural approaches (Batcheller, 1942; Binder,

We wish to thank those individuals whose ideas or suggestions have contributed to our ongoing research: Drs. Robert Hare, Paul Lerner, Philip Erdberg, Katherine DiFrancesca, Judith Meyers, Cary Weber, and Joanna Berg. We also extend appreciation to Donna Peaslee, Margot Moser, and Mark Rodland for providing assistance in rescoring and determining interrater reliabilities for Rorschach indices.

The views expressed in this article are solely those of the authors and do not necessarily reflect the views of Atascadero State Hospital, the California State Department of Mental Health, the University of California at San Diego, or the County of San Diego. An earlier version of this article was presented at the annual meeting of the Society for Personality Assessment, March 1991, New Orleans.

Correspondence should be addressed to Carl B. Gacono, Ph.D., P.O. Box 923, San Luis Obispo, CA 93406 or to J. Reid Meloy, Ph.D., 964 Fifth Avenue, San Diego, CA 92101.

1932; Geil, 1943), which were of little use in differentiating psychopathic disorder from other characterological disorders. Despite discouraging empirical findings, Lindner (1943) concluded that psychopathy could be diagnosed with the aid of the Rorschach. He thought that psychopaths produced recognizable, and to a degree unmistakable, protocols characterized by superficiality, avoidance, explosiveness, incompleteness, and egocentricity. He attributed the Rorschach's empirical failure in this area to both a lack of diagnostic clarity for assessing psychopathy and a paucity of sophistication in interpreting the test (Lindner, 1943).

Discussions of psychopathic Rorschach indices since Lindner's (1943) seminal paper often have involved poorly delineated or nonpsychopathic subjects. Exner (1986) did not provide specific diagnostic information for felons or psychopaths in his character-disordered sample. His interpretation of variables such as reflections, pairs (Exner, 1969, 1973, 1986), personals, texture, shading, vista, white space (also see Carlson & Drehmer, 1984), and aggressive movement (Exner, 1986) did not make reference to primary psychopathy.

Smith (1980), Sugarman (1980), Exner (1969), and H. Lerner (1988) presented indices associated with narcissistic, but not psychopathic, Rorschach records. P. Lerner and Lerner (1980) and Cooper, Perry, and Arnow (1988) developed systems for scoring defensive operations (also see Cooper & Arnow, 1986; Grala, 1980) related to borderline pathology that could be applied to psychopaths. Kwawer (1980), Blatt, Brenneis, Schimek, and Glick (1976), Urist (1977), and Coonerty (1986) presented indices indicative of object relations maturity and borderline personality organization that could provide measurement of the intrapsychic functioning of the psychopath (Meloy, 1988).

In this study we utilize advances in assessing psychopathy (American Psychiatric Association, 1987; Hare, 1980, 1985a, 1985b), Rorschach scoring and interpretative advances, and our previous (Gacono, 1990; Gacono & Meloy, 1991; Gacono, Meloy, & Heaven, 1990) and new empirical findings to determine the extent to which the Rorschach lends itself to diagnosing and understanding psychopathic disturbance. We investigate Rorschach data from a group of Antisocial Personality Disordered (American Psychiatric Association, 1987) offenders (APD), determine the sample's concordance with Meloy's (1988) proposed hypotheses for psychopathic disturbance, and discuss the structural indices, object relations, and defensive operations of these subjects.

METHOD

Subjects

Two hundred two records were selected randomly from the files of the entire inmate population of a California State Correctional Facility. One hundred two files were reviewed on the basis of successive admission to the facility between July 1987 and September 1987 (Gacono, 1988; Heaven, 1988). An additional 100 records were screened from successive admissions after September 1987. Those inmate subjects whose records suggested the presence of APD (DSM-III-R; American Psychiatric Association, 1987) were interviewed about participation in our ongoing research. The final diagnosis for APD was determined from both semi-structured interview and record data. When the authors were not in agreement as to the presence of APD, the case was not included in the study. All subjects were male volunteers who were free of a diagnosis of functional psychosis, organic mental disorder, or mental retardation.

Sixty APD subjects produced Rorschach protocols of ≥ 14 responses and were included in our sample. (See Table 1.) Thirty-six Rorschach protocols came from the randomly selected prison screening, 9 from randomly selected subjects incarcerated in other correctional facilities within San Diego County, 12 from other correctional facilities in California, and 3 were probation violators tested in an outpatient setting. These latter 15 protocols were not part of the random sampling that applied to the other 45

protocols. Thirty-six were Caucasian (60%), 11 Black (18%), 11 Hispanic (18%), and 2 Other (4%).

Forty-three research subjects from the prison screening had been rated with the Revised Psychopathy Checklist (PCL-R) and included in the psychopathy comparison groups. Twelve subjects within the comparison groups ($n = 43$) were not part of the APD sample ($N = 60$).

Instruments and Procedure

Each subject completed an intelligence measure and the Rorschach. Intelligence estimates were taken from scores on the Shipley Institute of Living Scale (Shipley, 1940; Zachary, 1986), the Wechsler Adult Intelligence Scale-Revised (Wechsler, 1981), or the Quick Test (Ammons & Ammons, 1977). Subjects with IQ scores < 80 were excluded from this study.

The Rorschach Inkblot Technique (Rorschach, 1942) was administered using the Comprehensive System (Exner, 1986). Each Rorschach protocol was scored for Comprehensive System data by one of the researchers and then rescored for reliability by an advanced clinical psychology graduate student trained in the Comprehensive System procedures (Exner, 1986). Problematic scoring was resolved through consultation with Philip Erdberg, Ph.D. Consistent with Exner's (1990) new normative statistics, protocols with fewer than 14 responses (Exner, 1988) were not included in the sample of 60.

Because the 14 response cut-off eliminates some valid protocols that contain adequate lambdas, valid protocols with ≥ 12 responses were kept for the within-group comparisons. A typical psychopathic response style often involves attempting to produce "perfect" W responses for all 10 cards. An increased proportion of Ws also results from the psychopath's need to maintain imaginary control over all perceptual aspects of the blot. This characterological constriction often results in a valid < 14 response protocol that contains rich clinical data. Within our comparison groups 1 subject produced 12 responses, while the remaining subjects produced ≥ 13 .

Twenty protocols were selected randomly from the comparison groups ($n = 43$) in order to determine the reliabilities of the object relations categories and defense indices. These were rescored by two advanced clinical psychology graduate students trained in Rorschach administration and scoring. Disagreements in scoring were resolved by the authors.

Once testing was completed, subjects participated in a structured interview for the purpose of verifying the presence of an APD diagnosis, ruling out a major mental disorder, and (when time permitted) as with the comparison subjects ($n = 43$), completing the PCL-R. Interview data in conjunction with a review of records were used to determine the level of psychopathy. These interviews were conducted by one researcher and observed by the other. PCL-R scores were rated independently by the researchers, and, as suggested by Hare (1980, 1985b), the average of the researchers' scores represented the final PCL-R score. The PCL-R score was used to order the subjects on a psychopathy continuum from 0 to 40 with ≥ 30 the cut-off for severe psychopathy (Hare, 1980).

Hare utilized Cleckley's (1941) criteria to establish his 20-item, 40-point scale. A growing body of research has demonstrated the reliability and validity of both the PCL and PCL-R (Hare et al., 1990) as measures of psychopathy in prison populations. Interrater reliabilities have ranged from .88 to .92, while test-retest reliabilities have ranged from .85 to .90 (Schroeder, Schroeder, & Hare, 1983). Criminals who score high on the PCL (≥ 30) have been found to differ significantly from low scorers (< 30) in lower levels of physiological responding (Hare, 1965, 1966, 1970; Hare, Frazelle, & Cox, 1978), poorer response to therapeutic intervention (Ogloff, Wong, & Greenwood, 1990), greater quantity and variety of offenses committed (Hare & Jutai, 1983), greater fre-

quency of violent offenses (Hare & McPherson, 1984), greater likelihood of reoffending, and lengthier criminal careers (Hare, McPherson, & Forth, 1988).

Analysis of Data

Means, standard deviations, and frequencies were determined for age, approximate IQ, Comprehensive System Data (Exner, 1986), object relations categories (Kwawer, 1980), and defenses (Cooper et al., 1988; P. Lerner & Lerner, 1980). Because of the sample size, distributions that did not approximate normal curves, and the indices' clinical meaning, object relations variables were compared utilizing the Mann-Whitney U non-parametric test or chi square. Defenses were not subjected to between-group comparisons, but listed for 43 subjects. Findings were considered significant when they reached the .05 level. Spearman's rho (Siegel, 1956) was used to assess the degree of agreement between the two raters' PCL-R scores. Proportion of interrater agreement was used to determine the interrater reliabilities for the object relations categories and defensive operations.

RESULTS

There were no significant differences among the age, IQ, or number of responses in our psychopathy comparison groups (P-APD; NP-APD). Spearman's rho (Siegel, 1956) yielded $r = .94$ for PCL-R scores.

Exner's (1986) Comprehensive System

Table 1 presents the Comprehensive System (Exner, 1986) Rorschach data for a sample of 60 APD males. Those 20 variables noted (*) are concordant with Meloy's (1988) proposed hypotheses for psychopathic disturbance. Concordance was achieved when the mean or frequency for a variable fell within the predicted range of Meloy's (1988) hypotheses.

Table 1
Descriptive Rorschach Variables for Incarcerated Antisocial Personality Disordered Males (N = 60)

Variable	M	SD	MIN	MAX	Frequency
AGE	29.67	7.51	18	48	60
IQ	101.9	13.06	80	137	46
R	21.48	8.46	14	47	60
*W	9.72	4.34	3	26	60
D	8.98	6.57	1	34	60
Dd	2.67	[2.86]	0	11	41
*S	2.53	[2.02]	0	8	47
DQ+	5.33	2.78	0	13	56
DQo	14.02	7.08	6	38	60
DQv	1.62	[1.86]	0	8	40
DQv/+	.52	[.83]	0	4	21
FQX+	—	—	0	1	5
FQXo	10.83	3.77	3	22	60
FQXu	4.67	3.25	0	13	59
FQX-	5.23	4.17	0	22	59
FQXnone	.67	[1.17]	0	5	23
MQ+	—	—	0	1	2
MQo	2.03	1.30	0	6	52
MQu	.57	.99	0	4	20
MQ-	.70	[.93]	0	5	30
MQnone	—	—	0	1	2

Table 1 (continued)

Variable	<i>M</i>	<i>SD</i>	MIN	MAX	Frequency
S-	.87	[1.03]	0	4	31
M	3.37	2.11	0	10	54
FM	3.23	1.70	0	7	58
m	1.38	1.74	0	10	38
FM + m	4.62	2.67	0	13	59
*FC	.93	1.05	0	4	33
*CF	1.78	1.89	0	9	43
*C	.78	[.98]	0	4	31
Cn	0	0	0	0	0
FC+CF+C+Cn	3.47	2.60	0	11	53
WGSum C	3.38	2.59	0	10.5	53
*Sum C'	1.40	[1.45]	0	6	40
*Sum T	.30	[.67]	0	3	13
*Sum V	.42	[.65]	0	3	22
Sum Y	1.90	[2.68]	0	13	40
SumShd	4.03	3.74	0	18	54
*Fr + rF	.72	[1.18]	0	5	23
*FD	.17	[.42]	0	2	20
F	9.08	4.84	0	24	59
PAIR	5.37	2.83	0	15	59
3r + (2)/R	.37	.18	0	.93	59
*LAMBDA	.87	.57	0	2.5	59
EA	6.75	3.32	1	14.5	60
es	8.62	5.28	2	27	60
D	-.47	1.43	-5	3	60
AdjD	.05	.95	-3	3	60
*a (active)	5.33	3.14	1	14	60
*p (passive)	2.65	1.89	0	8	55
*Ma	2.1	1.63	0	6	49
*Mp	1.27	1.26	0	6	41
Intellect	2.78	3.99	0	25	43
Zf	12.05	4.36	4	26	60
Zd	-.47	9.47	-7.5	7	60
Blends	3.65	2.70	0	11	57
Col Shd Blends	.80	[1.16]	0	5	28
*Afr	.55	.28	.15	1.57	60
Popular	5.08	1.87	1	9	60
*X + %	.53	.16	.2	.85	60
F + %	.53	.23	0	1	57
X - %	.23	.11	0	.5	59
Xu %	.21	.11	0	.42	59
S - %	.16	[.21]	0	1	31
Isolate	.20	.15	0	.6	55
H	2.20	1.55	0	5	49
(H)	.92	1.15	0	5	31
Hd	1.52	1.68	0	6	40
(Hd)	.23	.56	0	3	13
Hx	.12	[.37]	0	2	7
All H Cont	4.87	2.88	0	13	58
A	8.28	3.25	3	16	60
(A)	.60	[.74]	0	3	28
Ad	2.13	[1.81]	0	8	53
(Ad)	.12	[.32]	0	1	7
An	.65	[.86]	0	4	27

Table 1 (continued)

Variable	<i>M</i>	<i>SD</i>	MIN	MAX	Frequency
Art	1.05	1.50	0	6	30
Ay	.57	[.85]	0	4	24
Bl	.35	[.75]	0	4	14
Bt	.98	1.06	0	5	38
Cg	1.03	1.07	0	4	38
Cl	.27	[.45]	0	1	16
Ex	.23	[.53]	0	2	11
Fi	.30	[.65]	0	3	21
*Fd	.50	.87	0	5	13
Ge	.20	[.60]	0	3	8
Hh	.38	.71	0	3	17
Ls	1.02	1.35	0	6	31
Na	.75	[1.05]	0	5	28
Sc	.87	[1.14]	0	5	30
Sx	.70	[.93]	0	4	27
Xy	.17	[.61]	0	4	6
Idio	1.28	1.64	0	8	39
DV	1.22	[1.91]	0	12	35
INCOM	1.48	[1.33]	0	5	45
DR	1.72	[2.27]	0	12	37
FABCOM	.52	[.81]	0	4	22
DV2	—	—	0	1	1
INC2	.15	[.40]	0	2	8
DR2	.13	[.43]	0	2	6
FAB2	.43	[.77]	0	3	18
ALOG	.13	[.47]	0	3	6
CONTAM	—	—	0	2	4
Sum6 Sp Sc	5.88	4.49	0	21	59
*W Sum 6	17.12	13.83	0	69	59
AB	.58	[1.53]	0	10	16
AG	.51	.83	0	4	22
CFB	0	0	0	0	0
COP	.72	.90	0	3	27
MOR	1.73	[1.84]	0	8	42
*PER	1.97	2.02	0	8	43
PSV	.25	[.57]	0	2	11

Note. — Frequencies equal the number of individual subjects who produced at least one response in the given category. Standard deviations listed in brackets may be unreliable and/or misleading and should not be included in most parametric analyses (Exner, 1990). Those variables noted (*) are concordant with Meloy's (1988) hypotheses for psychopathic disturbance. Twenty-eight of these Rorschach variables previously were printed in Gacono and Meloy (1991).

Psychopathic Object Relations

The 43 subject protocols from the comparison groups were scored for individual object relations and a composite object relations score. Twenty protocols were selected randomly for an acceptable interrater agreement. Percent agreement for the total object relations categories was 95%; individual categories yielded the following: symbiotic merging 100%; violent symbiosis, separation, and reunion 100%; birth-rebirth 87%; malignant internal process 100%; and narcissistic mirroring 100%. Categories with less than 5 responses were not analyzed for interrater agreement.

Table 2
Means, Standard Deviations, and Frequencies for Primitive Object Relations Categories in Antisocial Personality Disorder (DSM-III-R)

Category	<i>M</i>	<i>SD</i>	Frequency	<i>M</i>	<i>SD</i>	Frequency
	Psychopathic APDs (P) (<i>n</i> = 22)			Non-psychopathic APDs (NP) (<i>n</i> = 21)		
Engulfment	—	—	0	.09	.30	1
Symbiotic Merging	.81	.93	12	.48	.68	7
Violent Symbiosis	.91	1.15	10	.57	.93	8
Birth and Rebirth	.14	.35	3	.24	.54	4
Malignant Internal Processes	.68	1.04	10	.33	.58	7
Metamorphosis and Transformation	.45	.67	7	.24	.89	2
Narcissistic Mirroring	1.00**	1.23	11	.14**	.36	3
Separation-Division	.36	.65	6	.09	.30	2
Boundary Disturbance	.59*	.54	12	.33*	.57	4
Womb Imagery	.09	.29	2	—	—	0
Total Primitive Object Relations	5.00***	2.39	22	2.24***	2.73	19

Note.—Frequencies equal the number of individual subjects who produced at least one response in the given category.

* $p < .05$ level, ($\chi^2 = 5.79$).

** $p < .05$ level, ($\chi^2 = 6.25$). Comparisons that utilized Mann-Whitney U nonparametric test significant $p < .05$.

***Mann-Whitney U analysis significant $p = .0001$.

Severe psychopaths (P-APD) produced a significantly greater proportion of borderline object relations ($p = .0001$). P-APDs more frequently produced boundary disturbance and narcissistic mirroring responses and produced a significantly greater proportion of narcissistic mirroring responses. Twenty-three of the 43 comparison protocols were utilized previously in a sample ($N = 33$) where object relations data were reported (Gacono, 1990).

Defensive Operations in Psychopathic Disturbance

The comparison groups also were scored for Lerner and Lerner (1980) and select Cooper et al. (1988) defense indices. An interrater check for the P. Lerner and Lerner (1980) defense indices from 20 randomly selected protocols revealed 85% agreement for composite devaluation, 83% for composite denial, and 100% for composite idealization. Less than 5 responses were obtained for splitting and projective identification; these were not included in the interrater reliability check. Because some of the Cooper et al. (1988) indices are overly inclusive, they were used as comparison data points only.

Although not statistically compared, observation of the means and frequencies for defense indices did not suggest group differences. Means, standard deviations, and frequencies (see Table 3) are listed for the 43 combined protocols. Consistent with previous findings (Gacono, 1990; Gacono, Meloy, & Berg, 1992), devalued content was the most frequently produced defense index with both the P. Lerner and Lerner (1980) and Cooper et al. (1988) systems. Within the P. Lerner and Lerner (1980) defenses, 77% of the APD sample produced at least one devaluation response, 28% did not produce a response more severe than level 1 for any category, while 16% of the sample failed to produce a scoreable defense response. One hundred percent of the APD subjects produced at least one Cooper et al. (1988) devaluation response, and 50% of the sample

produced ≥ 4 . This should be interpreted with caution. Contrary to the Lerner and Lerner (1980) scale, the Cooper et al. (1988) system includes all levels of devaluation and idealization within one category and does not differentiate between primitive and higher levels.

Massive denial, which is closest to the P. Lerner and Lerner (1980) lower levels of denial, was the second most frequently produced response with a frequency of 81% for the APD sample. Sixty-eight percent of the P-APDs produced splitting responses, 68% omnipotence, 50% primitive idealization, 77% projective identification, 91% massive denial, and 27% higher level denial. Forty-eight percent of the NP-APDs produced splitting responses, 57% omnipotence, 38% primitive idealization, 76% projective identification, 71% massive denial, and 10% higher level denial.

Table 3
Means, Standard Deviations, and Frequencies for Defensive Operations for Antisocial Personality Disordered Subjects (DSM-III-R) ($N = 43$)

Category	<i>M</i>	<i>SD</i>	Freq.	Category	<i>M</i>	<i>SD</i>	Freq.
Lerner & Lerner (1980)				Cooper, Perry, & Arnow (1988)			
Splitting	.14	.41	5	Splitting	1.09	1.32	25
Devaluation				Devaluation	4.14	2.62	43
Level 1	.61	.69	21	Omnipotence	1.21	1.34	27
Deval 2	.26	.62	8	Primitive ID	.88	1.37	19
Deval 3	.42	.73	12	Projective ID	1.79	1.55	33
Deval 4	—	—	2	Projection	—	—	NS
Deval 5	.58	.85	17	Denial			
Idealization				Pollyanish	—	—	NS
Level 1	—	—	0	Massive	2.00	1.54	35
Ideal 2	—	—	0	Hypomanic	—	—	NS
Ideal 3	—	—	2	Higher Level	.19	.40	8
Ideal 4	—	—	0	Rationalization	—	—	NS
Ideal 5	—	—	2				
Denial				Intellectual	—	—	NS
Level 1	.21	.51	7	Isolation	—	—	NS
Denial 2	.14	.35	5	Reaction F	—	—	NS
Denial 3	.54	.73	17	Repression	—	—	NS
Projective ID	.14	.35	6				

Note. — Frequencies equal number of individual subjects who produced at least one response in a category. Categories with < 5 responses were not analyzed. Those Cooper, Perry, and Arnow (1988) indices that were not rated are indicated by NS (not scored).

Our APD sample produced low mean scores for the defense indices when compared to the 15 borderline patients in the P. Lerner and Lerner (1980) original sample. This may reflect the tendency of antisocial individuals to present their defensive functioning in other than whole human movement responses (Gacono, 1988, 1990; Meloy, 1988). This trend is supported by the higher incidence of primitive defenses scoreable by the Cooper et al. system (1988) and suggests the need to examine nonhuman responses in the protocols of antisocial personality disordered individuals. Twenty-three of the 43 comparison protocols were utilized previously in a sample ($N = 33$) in which defensive

operations were discussed (Gacono, 1990). Although the P. Lerner and Lerner (1980) criteria used to analyze the prior sample ($N = 33$) were identical to those used in this study, the Cooper and Arnow (1986) criteria were not identical to the Cooper et al. (1988) criteria used in the present study.

DISCUSSION

Our findings empirically support Lindner's (1943) hypotheses 50 years after his classic paper on psychopathy and the Rorschach. APD subjects produce differential patterns consistent structurally and dynamically with theoretical constructs. P-APDs also produce Rorschach patterns that not only are consistent with theory, but that differentiate them from NP-APDs (Gacono & Meloy, 1991; Gacono et al., 1990).

The APDs' high frequencies and means for reflections (38%) and personals ($M = 1.97$), compared to Exner's (1990) nonpatients ($Fr + rF = 6.7\%$; PER, $M = 1.05$), nonpatient males ($Fr + rF = 6.3\%$; PER, $M = .93$), and character disorders ($Fr + rF = 20\%$; PER, $M = .93$), are consistent with pathological narcissism and omnipotence noted in APD. These variables are significantly greater for P-APDs, as are egocentricity ratios ($M = .46$, $SD = .18$) when compared to those of nonpatient males ($M = .38$, $SD = .07$) and NP-APDs ($M = .30$, $SD = .14$; Gacono et al., 1990). However, when P-APDs and NP-APDs are combined (see Table 1), their mean egocentricity ratio ($M = .37$, $SD = .18$) is similar to that of Exner's (1990) nonpatients ($M = .39$, $SD = .07$) and less than that of his character-disordered group ($M = .46$, $SD = .17$). Decreased pairs and elevated reflections in the egocentricity ratio of APDs may represent a regressed form of narcissism (Gacono et al., 1990) when compared to groups whose egocentricity ratio is formed by the opposite ratio of pairs to reflections. An elevated proportion of Ws ($M = 9.72$, $SD = 4.34$) also suggests the grandiosity of APDs because in APD subjects, aspirations (high W) supercede real world abilities (low M). Pleasure in fantasy is more desirable than the pain and endurance involved in effort toward responsible goals.

Narcissism allied with a lack of affectional relatedness, that is, low mean ($M = .30$, $SD = .67$) and frequency (22%) of texture responses, speaks to the independent style (Millon, 1981) and profound interpersonal detachment of APDs. Previous data (Gacono & Meloy, 1991) suggested that interpersonal detachment is even more pronounced in the P-APDs ($T = 5\%$). The lower frequency of H (82%) and higher frequency of Hd (67%) in APDs, when compared to Exner's (1990) nonpatient group ($H = 99\%$, $Hd = 50\%$) and nonpatient males ($H = 99\%$, $Hd = 49\%$), may measure the paucity of whole and real human objects as mental representations, and actual relationships dominated by part object attachments. Frequent reflections, lower H, increased Hd, low T, and low M also suggest impaired empathy and decreased interest in human relations (Meloy, 1988). These structural data (Exner, 1986) are convergent with the high proportion of Kwawer's (1980) borderline indices, particularly narcissistic mirroring and symbiotic merging (see Table 2) in the severe psychopaths. As expected, the frequency of COPs (45%) is lower than nonpatients (Exner, 1990), whose frequency approaches 80%. The presence of any COPs in APDs should be interpreted cautiously. Rather than signaling a potential for cooperative human interaction, they may indicate superficial charm and the ability to create a social facade, which provide an illusion of cooperativeness.

Problems with affect modulation are suggested by an FC to CF + C ratio of 1 to 2.5, which is proportionally the opposite of that of nonpatients (2:1). The high frequency of Y (67%) and the presence of V may reflect the low frequency of P-APDs in our ($N = 60$) APD sample (22%, roughly the frequency of severe psychopaths in a prison setting), and perhaps the tendency of APDs to experience helplessness (anxiety) and engage in negative rumination when incarcerated. P-APDs are less likely to experience

this same breakdown in defensive functioning, indicated by significantly less Y (Gacono & Meloy, in press) and significantly greater egocentricity ratios (Gacono et al., 1990). Surprisingly, D and adjusted D scores for APDs are similar to nonpatients. We think "impulsivity" in these individuals as a group, rather than indicating inadequate stress tolerance and behavioral controls, suggests the deliberate use of unmodulated affect to control objects in their environment.

Although FD was produced in the expected direction, APDs produced this response (33%) less frequently than nonpatients (78%). Objective introspection is clinically unlikely in this group. Self-focus is more likely to involve self-pity (V) and narcissism (Fr + rF) than FD. Elevated Sum of Shading means ($M = 4.03$, $SD = 3.74$), Morbids ($M = 1.73$, $SD = 1.84$), Aggressive Past (Gacono, 1990; Meloy & Gacono, 1992, in press), and violent symbiosis responses (Kwawer, 1980) implicate a dysphoric, aggressively tinged, malevolent internal object world. The data also suggest an inability to differentiate affect states at a basic level of pain and pleasure (Color shading blends, $M = .80$, $SD = 1.16$, Freq. = 47%). Similar confusion is suggested in food ambivalence responses (Phil Erdberg, personal communication) and splitting that occurs when aggressive and sexual drives are mixed with desires for nurturance (Gacono & Meloy, 1991). Acts of sexual homicide are extreme behaviors that highlight this pattern of oral rage toward the usually maternal object (Gacono, 1992). Our sample had a 45% frequency of sexual content responses ($M = .70$).

Aggressive responses are produced less frequently by APDs (37%) than by nonpatients (67%), possibly due to the face validity of AG and a deliberate censoring of this response (Meloy, 1988; Meloy & Gacono, 1992). Low associations of AG to severe psychopathy (Meloy & Gacono, 1992), a group that is frequently and severely violent (Hare & McPherson, 1984), and the inability of AG to discriminate among APDs, borderline and narcissistic outpatients (Gacono et al., in press), and Exner's (1990) nonpatients suggest that inferences from the AG response to real-world behavior are not justified in APD samples. Rather than producing AG, APDs more frequently express their aggressive drives through elevations in S, Aggressive Past, Aggressive Potential, and Sado-masochistic responses as well as object relations paradigms such as Kwawer's (1980) violent symbiosis response. At least 50% of our APD sample produced one S— with a mean S— % of .16. We have routinely observed - or u form quality in S responses in protocols in which adequate form quality accompanies responses that include AgPast or AgPot. This probably speaks to the disruptive effect of constrained aggression (brooding) in APDs and the restorative function of acting out aggression in both wish (Ag, AgPast, AgPot) and deed (DSM-III-R, American Psychiatric Association, 1987).

Lower F+ % and X+ %, along with elevated X— % ($M = .23$) and Wsum6 ($M = 17.12$), suggest moderate, but pervasive formal thought disorder and serious reality testing problems in APDs. Responses characterized by tangential answers and unusual perceptions and combinations, primarily level 1 special scores, may contribute to understanding Cleckley's (1941, p. 238) phrase, the "semantically disordered" psychopath. In general, thought disorder in the severe psychopath often is seen in loose and tangential elaborations that are personalized in a grandiose manner. For example, one very narcissistic APD would produce an adequate response and then state, "Let me improvise," at which point his elaboration would warrant a special score. Berg (1990) thought the cognitive slippage in narcissistic disorders preserved a grandiose sense of self, while slippage in borderline patients was linked to negative affects and a weak defensive structure. A fuller Rorschach investigation of the psychopath's cognitive processes is necessary (Meloy & Singer, 1991).

Despite the lack of sensitivity of the individual object relations categories in differentiating P-APDs from NP-APDs, every P-APD produced at least one of the Kwawer (1980) indices. Although these indices are not specific to psychopathy, valid APD protocols without the presence of at least one of the Kwawer (1980) indices are less likely

to belong to a primary psychopath. The high mean number of these responses in the P-APDs ($M = 5.0$, $SD = 2.39$), allied with higher egocentricity ratios, less T, and less Y, suggests that despite being severely borderline, the P-APDs are less conflicted in their behaviors (Gacono & Meloy, 1992). This may indicate the smoothness with which defensive operations bolster their grandiosity by warding off both internal anxiety and external threats to their grandiose self-structure (Gacono & Meloy, 1992, Meloy, 1988).

APDs primarily rely on the defenses of devaluation and lower levels of denial (Gacono, 1990; Gacono & Meloy, 1988). The prevalence of devaluation and massive denial, with an absence of higher-level denial and idealization (see Table 3), may indicate their lack of compensatory mechanisms (H. Lerner, 1988; Van-Der Keshet, 1988) or pseudosublimatory channels (Kernberg, 1975), and their tendency to discharge impulses and conflicts directly through action (Piran & Lerner, in press). This psychodynamic finding correlates with behaviors that demonstrate a lack of consistent career choice and difficulties maintaining employment, the PCL-R's second factor (antisocial life style) and many of the DSM-III-R's (American Psychiatric Association, 1987) criteria. The lack of idealization in the antisocial sample is consistent with the P. Lerner and Van-Der Keshet (in press) finding that nonpsychiatric control subjects were more likely to use idealization than a number of clinical comparison groups. Because P. Lerner and Lerner's (1980) idealization is more sensitive to adaptive than to defensive operations (P. Lerner & Van-Der Keshet, in press; P. Lerner, 1991), it is virtually lacking in the APD sample.

When antisocial individuals do produce idealization responses, they are likely to be expressed through primitive idealization ($\geq ID3$) or non-human percepts. This may represent their propensity to idealize non-human "hard objects" rather than human "soft objects" and may originate in early developmental identifications (Meloy, 1988, 1992). When the psychopath produces a human idealized percept it frequently suggests self-idealization (reflections and PER) and involves other primitive defenses, such as omnipotence and projective identification. The following response produced by a 39-year-old violent rapist who scored 32 on the PCL-R demonstrates self-idealization, along with hysterical cognition as measured by the impressionistic response (Gacono et al., 1990): (Card IV) "Oh, what was the name, a picture of that Greek god with wings on his feet. These would be black clouds, it's all a reflection. (Inquiry?) Head, top of it, wings, the rest of the figure would be black clouds, and there's trouble brewing in paradise. (Clouds?) I can think of nothing else that would go along with the picture, stands to reason, think of a god or goddess being in a cloud. He's flying into clouds. (Reflection?) Same thing down here. (Trouble?) black clouds, begets rain. When someone gets angry black clouds. I think of danger. I'm a very angry person sometimes."

Significant advances have occurred in both diagnosis (American Psychiatric Association, 1987; Hare, 1980, 1985b) and Rorschach sophistication since Lindner's (1943) study of the psychopath. Although our findings are by no means conclusive, they do demonstrate the application of advanced assessment techniques to the study of one personality disorder. Perhaps 50 years from now instruments will assess cognitive, dynamic, and physiological variables in a manner that allows for the accurate diagnosis and successful treatment of psychopathy.

REFERENCES

- AMERICAN PSYCHIATRIC ASSOCIATION. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed. rev.). Washington: Author.
- AMMONS, R., & AMMONS, C. (1977). The Quick Test (QT): Provisional manual. *Psychological Reports: Monograph Supplement*, 1-11, 111-161.
- BATCHELLER, D. (1942). *The use of the Rorschach method in a large modern prison*. Paper presented at the Southeastern Rorschach Conference.

- BERG, J. (1990). Differentiating ego functions of borderline and narcissistic personalities. *Journal of Personality Assessment*, 55, 537-548.
- BINDER, H. (1932). Die Helldunkeldeutungen im psychodiagnostischen Experiment von Rorschach. *Archives of Neurological Psychiatry*, 30, 1-67.
- BLATT, S., BRENNIS, C., SCHIMEK, J., & GLICK, M. (1976). Normal development and psychopathological impairment of the concept of the object on the Rorschach. *Journal of Abnormal Psychology*, 85, 364-373.
- CARLSON, R., & DREHMER, D. (1984). Rorschach space response and aggression. *Perceptual and Motor Skills*, 4, 101-116.
- CLECKLEY, H. (1941). *The mask of sanity*. St. Louis, MO: Mosby.
- COONERTY, S. (1986). An exploration of separation-individuation themes in the borderline personality disorder. *Journal of Personality Assessment*, 50, 501-511.
- COOPER, S., & ARNOW, D. (1986). An object relations view of the borderline defense: A Rorschach analysis. In M. Kissen (Ed.), *Assessing object relations phenomena* (pp. 143-171). Madison, CT: International Universities Press.
- COOPER, S., PERRY, J., & ARNOW, D. (1988). An empirical approach to the study of defense mechanisms: I. Reliability and preliminary validity of the Rorschach defense scales. *Journal of Personality Assessment*, 52, 187-203.
- EXNER, J. (1969). Rorschach responses as an index of narcissism. *Journal of Projective Techniques and Personality Assessment*, 33, 324-330.
- EXNER, J. (1973). The Self-Focus sentence completion: A study of egocentricity. *Journal of Personality Assessment*, 37, 437-455.
- EXNER, J. (1986). *The Rorschach: A comprehensive system: Volume 1: Foundations* (2nd ed.). New York: John Wiley.
- EXNER, J. (1988). Problems with brief Rorschach protocols. *Journal of Personality Assessment*, 52, 640-647.
- EXNER, J. (1990). *A Rorschach workbook for the comprehensive system* (3rd ed.). Asheville, NC: Rorschach Workshops.
- GACONO, C. (1988). *A Rorschach analysis of object relations and defensive structure and their relationship to narcissism and psychopathy in a group of antisocial offenders*. Unpublished doctoral dissertation, United States International University, San Diego, CA.
- GACONO, C. (1990). An empirical study of object relations and defensive operations in antisocial personality disorder. *Journal of Personality Assessment*, 54, 589-600.
- GACONO, C. (1992). A Rorschach study of sexual homicide. Manuscript submitted for publication.
- GACONO, C., & MELOY, J. R. (1988). The relationship between cognitive style and defensive process in the psychopath. *Criminal Justice and Behavior*, 15, 472-483.
- GACONO, C., & MELOY, J. R. (1992). Some thoughts on Rorschach findings and psychophysiology in the psychopath. Manuscript submitted for publication.
- GACONO, C., & MELOY, J. R. (1991). A Rorschach investigation of attachment and anxiety in antisocial personality disorder. *Journal of Nervous and Mental Disease*, 179, 546-552.
- GACONO, C., MELOY, J. R., & BERG, J. (1992). Object relations, defensive operations, and affective states in narcissistic, borderline, and antisocial personality. *Journal of Personality Assessment*, 59, 32-49.
- GACONO, C., MELOY, J. R., & HEAVEN, T. (1990). A Rorschach investigation of narcissism and hysteria in antisocial personality disorder. *Journal of Personality Assessment*, 55, 270-279.
- GEIL, G. (1943). Psychological studies concerning psychopaths. *Proceedings of the 72nd Congress of the American Prison Association*, New York.
- GRALA, C. (1980). The concept of splitting and its manifestations on the Rorschach test. *Bulletin of the Menninger Clinic*, 44, 253-271.
- HARE, R. (1965). Temporal gradient of fear arousal in psychopaths. *Journal of Abnormal Psychology*, 70, 442-445.
- HARE, R. (1966). Psychopathy and choices of immediate and delayed punishment. *Journal of Abnormal Psychology*, 71, 25-29.
- HARE, R. (1970). *Psychopathy: Theory and research*. New York: John Wiley.
- HARE, R. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences*, 1, 111-119.
- HARE, R. (1985 a). Comparison of procedures for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology*, 53, 7-16.
- HARE, R. (1985 b). *The psychopathy checklist*. Unpublished manuscript, University of British Columbia, Vancouver.

- HARE, R., FRAZELLE, J., & COX, D. (1978). Psychopathy and physiological response to threat of an aversive stimulus. *Psychophysiology*, 15, 165-172.
- HARE, R., HARPUR, T., HAKSTIAN, A., FORTH, A., HART, S., & NEWMAN, J. (1990). The revised psychopathy checklist: Reliability and factor structure. *Psychological Assessment: A Journal of Clinical and Consulting Psychology*, 2:3, 338-341.
- HARE, R., & JUTAI, J. (1983). Criminal history of the male psychopath: Some preliminary data. In K. Van Dusen & S. Mednick (Eds.), *Prospective studies of crime and delinquency*. Boston: Kluner Mijhoff.
- HARE, R., & MCPHERSON, L. (1984). Violent and aggressive behavior by criminal psychopaths. *International Journal of Law and Psychiatry*, 7, 35-50.
- HARE, R., MCPHERSON, L., & FORTH, A. (1988). Male psychopaths and their criminal careers. *Journal of Consulting and Clinical Psychology*, 56, 710-714.
- HEAVEN, T. (1988). *Relationship between Hare's Psychopathy Checklist and selected Exner Rorschach variables in an inmate population*. Unpublished doctoral dissertation, United States International University, San Diego, CA.
- KERNBERG, O. (1975). *Borderline conditions and pathological narcissism*. New York: Jason Aronson.
- KWAWER, J. (1980). Primitive interpersonal modes, borderline phenomena and Rorschach content. In J. Kwawer, A. Sugarman, P. Lerner, & H. Lerner (Eds.), *Borderline phenomena and the Rorschach test* (pp. 89-109). New York: International Universities Press.
- LERNER, H. (1988). The narcissistic personality as expressed through psychological tests. In H. Lerner & P. Lerner (Eds.), *Primitive mental states and the Rorschach* (pp. 257-297). Madison, CT: International Universities Press.
- LERNER, P. (1991). *Psychoanalytic theory and the Rorschach*. Hillsdale, NJ: Analytic Press.
- LERNER, P., & LERNER, H. (1980). Rorschach assessment of primitive defenses in borderline personality structure. In J. Kwawer, A. Sugarman, P. Lerner, & H. Lerner (Eds.), *Borderline phenomena and the Rorschach test* (pp. 257-274). New York: International Universities Press.
- LERNER, P., & VAN-DER KESHET, Y. (in press). A note on the assessment of idealization. *Journal of Personality Assessment*.
- LINDNER, R. (1943). The Rorschach test and the diagnosis of psychopathic personality. *Journal of Criminal Psychopathology*, July, 69-93.
- MELOY, J. R. (1988). *The psychopathic mind: Origins, dynamics, and treatment*. Northvale, NJ: Jason Aronson.
- MELOY, J. R. (1992). *Violent attachments*. Northvale, NJ: Jason Aronson.
- MELOY, J. R., & GACONO, C. (1992). The aggression response and the Rorschach. *Journal of Clinical Psychology*, 48, 104-114.
- MELOY, J. R., & GACONO, C. (in press). *The Rorschach and psychopathy: A structural and psychoanalytic investigation*. Hillsdale, NJ: Erlbaum.
- MELOY, J. R., & SINGER, J. (1991). A psychoanalytic view of the comprehensive system "special scores." *Journal of Personality Assessment*, 56, 202-217.
- MILLON, T. (1981). *Disorders of personality: DSM-III-R: Axis II*. New York: John Wiley.
- OGLOFF, J., WONG, S., & GREENWOOD, A. (1990). Treating criminal psychopaths in a therapeutic community program. *Behavioral Sciences and the Law*, 8, 181-190.
- PIRAN, N., & LERNER, P. (in press). Borderline phenomena in anorexia nervosa and bulimia. *Advances in Personality Assessment*.
- RORSCHACH, H. (1942). *Psychodiagnostics*. New York: Grune & Stratton.
- SCHROEDER, M., SCHROEDER, K., & HARE, R. (1983). Generalizability of a checklist for the assessment of psychopathy. *Journal of Consulting and Clinical Psychology*, 51, 511-516.
- SHIPLEY, W. C. (1940). A self-administering schedule for measuring intellectual impairment and deterioration. *Journal of Psychology*, 9, 371-377.
- SIEGEL, S. (1956). *Nonparametric statistics for the behavioral sciences*. New York: McGraw-Hill.
- SMITH, K. (1980). Object relations concepts as applied to borderline level of ego functioning. In J. Kwawer, A. Sugarman, P. Lerner, & H. Lerner (Eds.), *Borderline phenomena and the Rorschach test* (pp. 59-87). New York: International Universities Press.
- SUGARMAN, A. (1980). The borderline personality organization as manifested on psychological tests. In J. Kwawer, A. Sugarman, P. Lerner, & H. Lerner (Eds.), *Borderline phenomena and the Rorschach test* (pp. 39-58). New York: International Universities Press.
- URIST, J. (1977). The Rorschach test and the assessment of object relations. *Journal of Personality Assessment*, 41, 3-9.
- VAN-DER KESHET, Y. (1988). *Anorexic patients and ballet students: A Rorschach analysis*. Unpublished doctoral dissertation, University of Toronto.