

College of Saint Benedict and Saint John's University

DigitalCommons@CSB/SJU

Psychology Faculty Publications

Psychology

7-2003

“Bin Laden’s Brain”: The Abrasively Negativistic Personality of Dr. Ayman al-Zawahiri

Aubrey Immelman

College of Saint Benedict/Saint John's University, aimmelman@csbsju.edu

Kathryn Kuhlmann

Follow this and additional works at: https://digitalcommons.csbsju.edu/psychology_pubs



Part of the [Criminology and Criminal Justice Commons](#), [Defense and Security Studies Commons](#), [Islamic Studies Commons](#), [Leadership Studies Commons](#), [Near and Middle Eastern Studies Commons](#), [New Religious Movements Commons](#), [Other Political Science Commons](#), [Peace and Conflict Studies Commons](#), [Personality and Social Contexts Commons](#), and the [Terrorism Studies Commons](#)

Recommended Citation

Immelman, A., & Kuhlmann, K. (2003, July). *“Bin Laden’s Brain”: The abrasively negativistic personality of Dr. Ayman al-Zawahiri*. Paper presented at the 26th Annual Scientific Meeting of the International Society of Political Psychology, Boston, MA, July 6–9, 2003. Retrieved from Digital Commons website: http://digitalcommons.csbsju.edu/psychology_pubs/31/



“The protests, demonstrations, and conferences will not do you any good. The only thing that will help you is to carry arms and wreak revenge against your enemies from the Americans and the Jews. ... The crusaders and the Jews do not understand except the language of killing and blood and are only convinced with returning coffins and destroyed interests and burning towers and collapsing economy.”
— Ayman al-Zawahiri, purportedly, in audiotape message broadcast May 21, 2003 by al-Jazeera

“BIN LADEN’S BRAIN”
THE ABRASIVELY NEGATIVISTIC PERSONALITY
OF DR. AYMAN AL-ZAWAHIRI

Aubrey Immelman and Kathryn Kuhlmann

Department of Psychology
Saint John’s University and the College of Saint Benedict

Unit for the Study of Personality in Politics
Collegeville, MN 56321-3000
Telephone: (320) 363-3198
Fax: (320) 363-3202
E-mail: aimmelman@csbsju.edu

Paper presented at the Twenty-Sixth Annual Scientific Meeting
of the International Society of Political Psychology

Boston, MA

July 6–9, 2003

Abstract

**“BIN LADEN’S BRAIN”
THE ABRASIVELY NEGATIVISTIC PERSONALITY
OF DR. AYMAN AL-ZAWAHIRI**

Aubrey Immelman and Kathryn Kuhlmann
Saint John’s University and the College of Saint Benedict
Unit for the Study of Personality in Politics
<http://www.csbsju.edu/uspp>
Saint John’s University
Collegeville, Minnesota

This paper presents the results of an indirect assessment of the personality of Ayman al-Zawahiri, from the conceptual perspective of Theodore Millon. Information concerning al-Zawahiri was collected from media reports and synthesized into a personality profile using the second edition of the Millon Inventory of Diagnostic Criteria (MIDC), which yields 34 normal and maladaptive personality classifications congruent with Axis II of *DSM-IV*.

The personality profile yielded by the MIDC was analyzed on the basis of interpretive guidelines provided in the MIDC and Millon Index of Personality Styles manuals. Al-Zawahiri’s primary personality patterns were found to be Contentious/oppositional and Dominant/controlling, with secondary features of the Dauntless/dissenting and Ambitious/self-serving patterns.

The amalgam of Contentious (negativistic, or passive-aggressive) and Dominant (aggressive, or sadistic) patterns in al-Zawahiri’s profile suggests the presence of Millon’s *abrasive negativist* syndrome. For these personalities, minor frictions easily exacerbate into major confrontations and power struggles. They are quick to spot inconsistencies in others’ actions or ethical standards and adept at constructing arguments that amplify observed contradictions. They characteristically take the moral high ground, dogmatically and contemptuously expose their antagonists’ perceived hypocrisy, and contemptuously, derisively, and scornfully turn on those who cross their path.

The major implication of the study is that it offers an empirically based personological framework for conceptualizing Ayman al-Zawahiri’s antagonistic negativism, single-minded commitment to a cause, inflammatory rhetoric, and forceful persuasiveness—qualities instrumental in Osama bin Laden’s insidious campaign to propagate diabolical enemy images of the West as a catalyst for incubating a political culture contrived to inculcate religious extremism in the Islamic world.

Introduction

Ayman Mohammed Rabie al-Zawahiri was born into a prestigious Egyptian family in Cairo on June 9, 1951.¹ His formative years were spent in Maadi, an affluent and cosmopolitan Cairo suburb (Blanche, 2001; Foden, 2001; Gibson, MacLeod, & Radwan, 2001; Jehl, 2001; Raafat, 2001). The trajectory of al-Zawahiri's path to terrorism can be traced to his arrest, at age 15, for membership in the outlawed al-Ilkwan al-Muslimum (the Muslim Brotherhood)—an organization “committed to purging Egyptian society of foreign influences” (Blanche, 2001). In a further act of defiance, the young al-Zawahiri subsequently joined the Egyptian Islamic Jihad, a movement founded in 1973 to topple Egypt's secular government and establish Islamic rule in Egypt and across the Arab world (Gibson et al., 2001; Miller, 2001).

In its most spectacular operation, the movement, which by the late 1970s had been taken over by al-Zawahiri (Blanche, 2001; Jehl, 2001), in 1981 orchestrated the assassination of Egyptian president Anwar Sadat at a military parade (Jehl, 2001; MacFarquhar, 2001). In the aftermath of the assassination, al-Zawahiri was arrested and charged with conspiracy; however, due to a lack of evidence he was acquitted and convicted on a lesser charge of illegally possessing an unlicensed pistol, for which he served three years in prison (Blanche, 2001; Miller, 2001). During his incarceration, al-Zawahiri was reportedly subjected to torture (Gibson et al., 2001; Wooten, 2001).

Upon his release in 1984, Dr. Zawahiri, having qualifying as a specialist surgeon four years after graduating from Cairo University medical school in 1974, opened a clinic in his hometown of Maadi (Jehl, 2001; Miller, 2001). After a year in medical practice, he joined the Red Crescent organization and set out for Peshawar, Pakistan around 1985, where he treated mujahideen casualties in the war against the Soviet occupation of Afghanistan (Gibson et al., 2001; Jehl, 2001; Miller, 2001).

It was apparently there that Dr. Zawahiri met Osama bin Laden. Both were scions of prominent families, both were well educated, and both were wealthy (Gibson et al., 2001; Miller, 2001). Ultimately, both would be associated with the August 1998 U.S. embassy bombings in Kenya and Tanzania, the October 2000 *U.S.S. Cole* bombing in Yemen, and the September 11, 2001 attack on the World Trade Center and the Pentagon.

By 1998, al-Zawahiri had risen to a position of prominence in the al-Qaida organization, the second signatory of bin Laden's infamous 1998 *fatwa*, which called for attacks against U.S. civilians (Foden, 2001; Wooten, 2001). Frequent references to al-Zawahiri as “bin Laden's right-hand man,” “bin Laden's lieutenant,” “the brains behind bin Laden,” or “the second-most-wanted man in the world” attest to his ideological and strategic importance to al-Qaida.

It is puzzling why this doctor, who “was trained to save lives and now is wanted for killing thousands” (Wooten, 2001), would trade the scalpel for the scimitar. More generally, in the post-September 11 world, there is greater urgency in understanding not only what drives the new generation of combatants in the jihad against the West, but also what motivates its leaders.

¹ “American documents list his date of birth as June 10, 1951, and place of birth as Giza” (Foden, 2001).

Against the backdrop of Ayman al-Zawahiri's family history, al-Zawahiri's leading role in the Egyptian Islamic Jihad—with its policy of assassinating high-ranking public officials as a key strategy in their goal to overthrow Egypt's government (Miller, 2001)—raises the possibility that his political agenda may be permeated by deep-seated psychological motives:

It is no secret the Azzam clan [the maternal branch of Ayman al-Zawahiri's family] does not lack men in high places. . . . [T]he Azzams include an (indicted) MP, a former governor of Giza and several state counselors and prosecutors. Likewise, the clan is top heavy with senior government administrators and diplomats. Ironically, Egypt's sitting Supreme State Security Court Chief Justice is himself a [*sic*] Azzam relation of Ayman al-Zawahiri [*sic*], his natty villa guarded round the clock lest he become the next victim of a terrorist attack. (Raafat, 2001)

If numerous aspiring Azzams joined the Arab League earning princely salaries during their uncle's heyday [Abdelrahman Azzam, whose daughter married the grandson of King Abd al-Aziz al-Saud of Saudi Arabia], the subsequent introduction of a direct family link to the Saudi monarchy enabled younger members of the clan to make it in the oil-rich kingdom. Others found gainful sinecures in Saudi financed organizations. . . . But Ayman al-Zawahiri [*sic*] was not one of them. Was he out of the loop by virtue of his zealotry, or was it Ayman who shunned his sheltered and more privileged relations? (Raafat, 2001)

Conceptually, the present study is informed by Theodore Millon's model of personality (1969, 1986a, 1986b, 1990, 1991, 1994, 1996, 2003; Millon & Davis, 2000; Millon & Everly, 1985) as adapted (Immelman, 1993, 1998, 2002c, 2003) for the study of personality in politics. The methodology entails the construction of theoretically grounded personality profiles derived from empirical analysis of biographical source materials.

Millon's Model of Personality and Its Utility for Indirect Personality Assessment

A comprehensive review of Millon's personological model and its applicability to political personality has been provided elsewhere (see Immelman, 1993, 1998, 2003; Immelman & Beatty, 2003). Briefly, Millon's model encompasses eight attribute domains: expressive behavior, interpersonal conduct, cognitive style, mood/temperament, self-image, regulatory mechanisms, object representations, and morphologic organization (see Table 1).

Purpose of the Study

The present study is a psychodiagnostic case study of the personality of Dr. Ayman al-Zawahiri, reputedly chief strategist for al-Qaida operations, and personal physician to Osama bin Laden. This is the third in a series of related studies of al-Qaida leadership figures. Previous studies examined the political personalities of al-Qaida leader Osama bin Laden (Immelman, 2002a) and September 11 hijack ringleader Mohamed Atta (Immelman, 2002b).

Table 1
Millon's Eight Attribute Domains

Attribute	Description
Expressive behavior	The individual's characteristic behavior; how the individual typically appears to others; what the individual knowingly or unknowingly reveals about him- or herself; what the individual wishes others to think or to know about him or her.
Interpersonal conduct	How the individual typically interacts with others; the attitudes that underlie, prompt, and give shape to these actions; the methods by which the individual engages others to meet his or her needs; how the individual copes with social tensions and conflicts.
Cognitive style	How the individual focuses and allocates attention, encodes and processes information, organizes thoughts, makes attributions, and communicates reactions and ideas to others.
Mood/temperament	How the individual typically displays emotion; the predominant character of an individual's affect and the intensity and frequency with which he or she expresses it.
Self-image	The individual's perception of self-as-object or the manner in which the individual overtly describes him- or herself.
Regulatory mechanisms	The individual's characteristic mechanisms of self-protection, need gratification, and conflict resolution.
Object representations	The inner imprint left by the individual's significant early experiences with others; the structural residue of significant past experiences, composed of memories, attitudes, and affects that underlie the individual's perceptions of and reactions to ongoing events and serves as a substrate of dispositions for perceiving and reacting to life's ongoing events.
Morphologic organization	The overall architecture that serves as a framework for the individual's psychic interior; the structural strength, interior congruity, and functional efficacy of the personality system (i.e., ego strength).

Note. From *Disorders of Personality: DSM-IV and Beyond* (pp. 141–146) by T. Millon, 1996, New York: Wiley; *Toward a New Personology: An Evolutionary Model* (chapter 5) by T. Millon, 1990, New York: Wiley; and *Personality and Its Disorders: A Biosocial Learning Approach* (p. 32) by T. Millon and G. S. Everly, Jr., 1985, New York: Wiley. Copyright © 1996, © 1990, © 1985 by John Wiley & Sons, Inc. Adapted by permission of John Wiley & Sons, Inc. and Theodore Millon.

Method

Materials

The materials consisted of biographical sources and the personality inventory employed to systematize and synthesize diagnostically relevant information collected from the literature on Ayman al-Zawahiri.

Sources of data. Diagnostic information pertaining to Ayman al-Zawahiri was collected from media reports of his personal characteristics. The following sources provided useful, diagnostically relevant biographical information:

1. "The Hunt for 'Public Enemy No 2,' " by Giles Foden, in the September 24, 2001 issue of *The Guardian*.
2. "Heir Apparent: Egyptian Seen As Top Aide and Successor to bin Laden," by Douglas Jehl, in the September 24, 2001 issue of *The New York Times*.
3. "Zawahiri: The Alleged Brains Behind bin Laden," by T. Christian Miller, in the October 2, 2001 issue of *The Los Angeles Times*.
4. "Beyond bin Laden. From Surgeon to Terrorist: The Second Most Wanted Man in the World," by Jim Wooten, posted October 2, 2001 on ABCNews.com.
5. "Ayman al-Zawahiri: Attention Turns to the Other Prime Suspect," by Ed Blanche, in the October 3, 2001 issue of *Jane's Intelligence Review*.
6. "Bin Laden's Lieutenant: Egyptian Raised Terror Funds in U.S. in 1990's," by Susan Sachs and John Kifner, in the October 23, 2001 issue of *The New York Times*.
7. "Ayman al-Zawahiri [*sic*]: The World's Second Most Wanted Man," by Samir Raafat, posted November 1, 2001 on Egy.com.
8. "Public Enemy No. 2: Meet the Egyptian Doctor Who Helps Call the Shots," by Helen Gibson, Scott MacLeod, and Amany Radwan, in the November 12, 2001 issue of *Time*.
9. "Word for Word/Jihad Lit: Beware of Hidden Enemies and Their Wolves and Foxes," by Neil MacFarquhar, in the December 9, 2001 issue of *The New York Times*.
10. "Bin Laden's No. 2 Still Alive & Plotting," compiled from *Post* wire services, in the December 13, 2001 issue of *The New York Post*.
11. "Insider Information: A Former Friend and Lawyer of Ayman al-Zawahiri Takes the Terrorist Leader on in a Startling New Book," by Scott MacLeod (with reporting by Amany Radwan), in the February 4, 2002 issue of *Time International*.

Personality inventory. The assessment instrument, the second edition of the Millon Inventory of Diagnostic Criteria (MIDC; Immelman & Steinberg, 1999), was compiled and adapted from Millon's (1969, 1986b; 1990, 1996; Millon & Everly, 1985) prototypical features and diagnostic criteria for normal personality styles and their pathological variants. Information concerning the construction, administration, scoring, and interpretation of the MIDC is provided in the Millon Inventory of Diagnostic Criteria manual (Immelman, 1999).² The 12-scale (see Table 2) instrument taps the first five "noninferential" (Millon, 1990, p. 157) attribute domains listed in Table 1.

² Inventory and manual available upon request from the first author.

Table 2
Millon Inventory of Diagnostic Criteria: Scales and Gradations

Scale 1A:	Dominant pattern a. Asserting b. Controlling c. Aggressive (Sadistic; <i>DSM-III-R</i> , Appendix A)
Scale 1B:	Dauntless pattern a. Venturesome b. Dissenting c. Aggrandizing (Antisocial; <i>DSM-IV</i> , 301.7)
Scale 2:	Ambitious pattern a. Confident b. Self-serving c. Exploitative (Narcissistic; <i>DSM-IV</i> , 301.81)
Scale 3:	Outgoing pattern a. Congenial b. Gregarious c. Impulsive (Histrionic; <i>DSM-IV</i> , 301.50)
Scale 4:	Accommodating pattern a. Cooperative b. Agreeable c. Submissive (Dependent; <i>DSM-IV</i> , 301.6)
Scale 5A:	Aggrieved pattern a. Unpresuming b. Self-denying c. Self-defeating (<i>DSM-III-R</i> , Appendix A)
Scale 5B:	Contentious pattern a. Resolute b. Oppositional c. Negativistic (Passive-aggressive; <i>DSM-III-R</i> , 301.84)
Scale 6:	Conscientious pattern a. Respectful b. Dutiful c. Compulsive (Obsessive-compulsive; <i>DSM-IV</i> , 301.4)
Scale 7:	Reticent pattern a. Circumspect b. Inhibited c. Withdrawn (Avoidant; <i>DSM-IV</i> , 301.82)
Scale 8:	Retiring pattern a. Reserved b. Aloof c. Solitary (Schizoid; <i>DSM-IV</i> , 301.20)
Scale 9:	Distrusting pattern d. Suspicious e. Paranoid (<i>DSM-IV</i> , 301.0)
Scale 0:	Erratic pattern d. Unstable e. Borderline (<i>DSM-IV</i> , 301.83)

Note. Equivalent *DSM* terminology and codes are specified in parentheses.

The 12 MIDC scales correspond to major personality patterns posited by Millon (1994, 1996), which are congruent with the syndromes described on Axis II of the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* of the American Psychiatric Association (APA; 1994) and coordinated with the normal personality styles in which these disorders are rooted, as described by Millon and Everly (1985), Millon (1994), Oldham and Morris (1995), and Strack (1997). Scales 1 through 8 (comprising 10 scales and subscales) have three gradations (a, b, c) yielding 30 personality variants, whereas Scales 9 and 0 have two gradations (d, e), yielding four variants, for a total of 34 personality designations, or types. Table 2 displays the full taxonomy.

Diagnostic Procedure

The diagnostic procedure, termed *psychodiagnostic meta-analysis*, can be conceptualized as a three-part process: first, an *analysis* phase (data collection) during which source materials are reviewed and analyzed to extract and code diagnostically relevant content; second, a *synthesis* phase (scoring and interpretation) during which the unifying framework provided by the MIDC prototypal features, keyed for attribute domain and personality pattern, is employed to classify the diagnostically relevant information extracted in phase 1; and finally, an *evaluation* phase (inference) during which theoretically grounded descriptions, explanations, inferences, and predictions are extrapolated from Millon's theory of personality based on the personality profile constructed in phase 2 (see Immelman, 1999, 2002c, 2003, for a more extensive account of the procedure).

Results

The analysis of the data includes a summary of descriptive statistics yielded by the MIDC scoring procedure, the MIDC profile for Ayman al-Zawahiri, diagnostic classification of the subject, and the clinical interpretation of significant MIDC scale elevations derived from the diagnostic procedure.

Al-Zawahiri received 44 endorsements on the 170-item MIDC. Descriptive statistics for al-Zawahiri's MIDC ratings are presented in Table 3.

Table 3
MIDC Item Endorsement Rate by Attribute Domain

Expressive behavior	11
Interpersonal conduct	12
Cognitive style	7
Mood/temperament	5
Self-image	9
Sum	44
Mean	8.8
Standard deviation	2.6

Al-Zawahiri's MIDC scale scores are reported in Table 4. The same data are presented graphically in the profile depicted in Figure 1.

Table 4
MIDC Scale Scores for Ayman al-Zawahiri

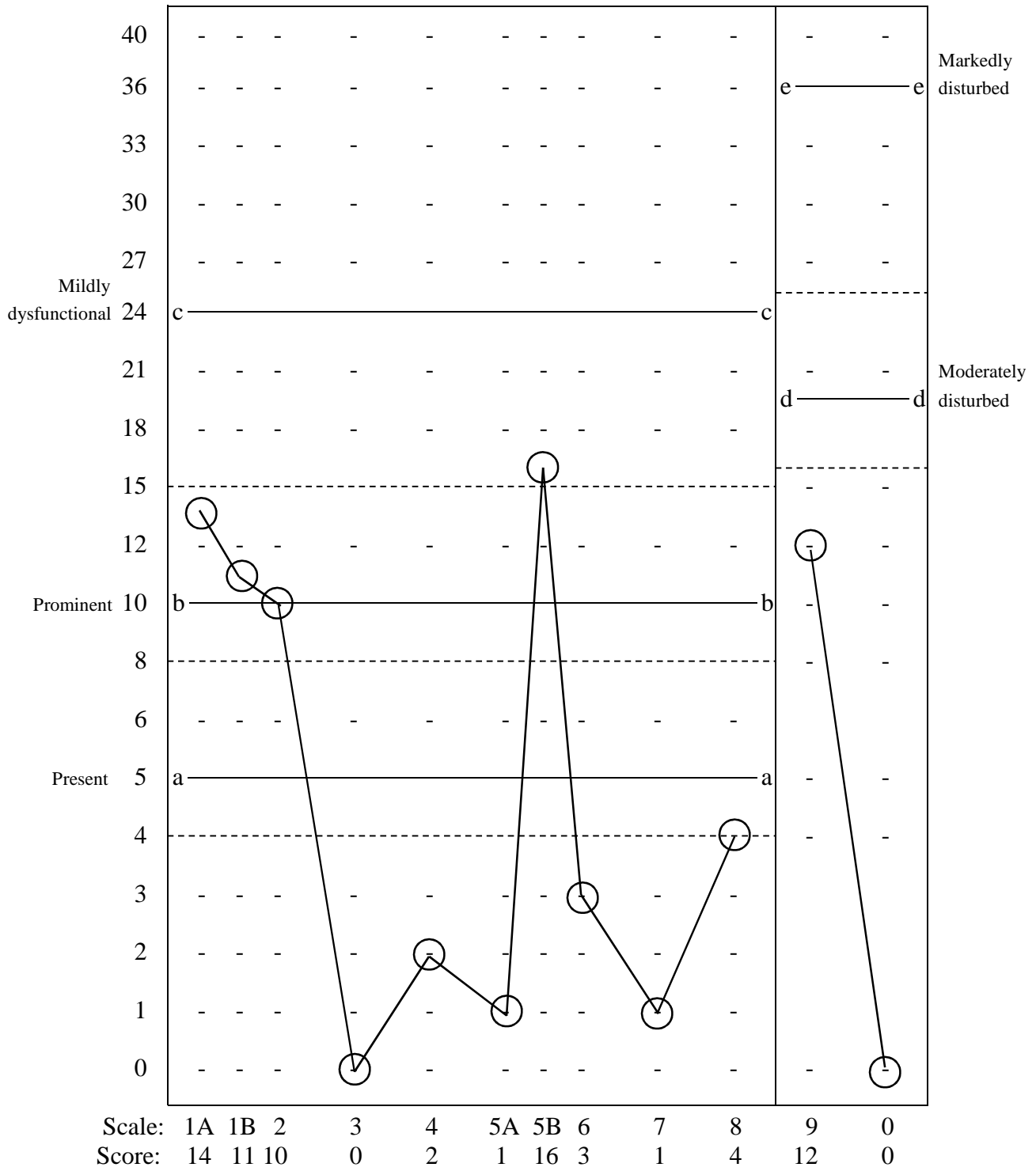
Scale	Personality pattern	Raw	RT%
1A	Dominant: Asserting–Controlling–Aggressive (Sadistic)	14	22.6
1B	Dauntless: Venturesome–Dissenting–Aggrandizing (Antisocial)	11	17.7
2	Ambitious: Confident–Self-serving–Exploitative (Narcissistic)	10	16.1
3	Outgoing: Congenial–Gregarious–Impulsive (Histrionic)	0	0.0
4	Accommodating: Cooperative–Agreeable–Submissive (Dependent)	2	3.2
5A	Aggrieved: Unpresuming–Self-denying–Self-defeating (Masochistic)	1	1.6
5B	Contentious: Resolute–Oppositional–Negativistic (Passive-aggressive)	16	25.8
6	Conscientious: Respectful–Dutiful–Compulsive (Obsessive-compulsive)	3	4.8
7	Reticent: Circumspect–Inhibited–Withdrawn (Avoidant)	1	1.6
8	Retiring: Reserved–Aloof–Solitary (Schizoid)	4	6.5
	Subtotal for basic personality scales	62	100.0
9	Distrusting: Suspicious–Paranoid (Paranoid)	12	16.2
0	Erratic: Unstable–Borderline (Borderline)	0	0.0
	Full-scale total	74	116.2

Note. For Scales 1–8, ratio-transformed (RT%) scores are the scores for each scale expressed as a percentage of the sum of raw scores for the ten basic scales only. For Scales 9 and 0, ratio-transformed scores are scores expressed as a percentage of the sum of raw scores for all twelve MIDC scales (therefore, full-scale RT% totals can exceed 100). Personality patterns are enumerated with scale gradations and equivalent *DSM* terminology (in parentheses).

The MIDC profile yielded by the raw scores is displayed in Figure 1.³ Al-Zawahiri's most elevated scale, with a score of 16, is Scale 5B (Contentious), closely followed by a score of 14 on Scale 1A (Dominant). Based on cut-off score guidelines provided in the MIDC manual, the Scale 5B and Scale 1A elevations are well within the *prominent* (10–23) range; however, neither scale approaches the *mildly dysfunctional* (24–30) range. Scales 1B (Dauntless) and 2 (Ambitious) are just within the *prominent* range. No other scale is psychodiagnostically significant.

³ See Table 2 for scale names. Solid horizontal lines on the profile form signify cut-off scores between adjacent scale gradations. For Scales 1–8, scores of 5 through 9 signify the *presence* (gradation a) of the personality pattern in question; scores of 10 through 23 indicate a *prominent* (gradation b) variant; and scores of 24 to 30 indicate an exaggerated, *mildly dysfunctional* (gradation c) variation of the pattern. For Scales 9 and 0, scores of 20 through 35 indicate a *moderately disturbed* syndrome and scores of 36 through 45 a *markedly disturbed* syndrome.

Figure 1. Millon Inventory of Diagnostic Criteria: Profile for Ayman al-Zawahiri



In terms of MIDC scale gradation (see Table 2 and Figure 1) criteria, al-Zawahiri was classified as primarily a blend of the Contentious/oppositional (Scale 5B) and Dominant/controlling (Scale 1A) personality patterns, with secondary features of the Dauntless/dissenting (Scale 1B) and Ambitious/self-serving (Scale 2) patterns. It bears note that al-Zawahiri's profile does not meet the minimum criterion (i.e., a Scale 9 elevation of 16; see Immelman, 1999) for inferring the existence of Distrusting (paranoid) personality attributes.⁴

Discussion

The discussion of the results examines Ayman al-Zawahiri's MIDC scale elevations from the perspective of Millon's (1994, 1996; Millon & Davis, 2000) model of personality, supplemented by the theoretically congruent portraits of Oldham and Morris (1995) and Strack (1997). The discussion concludes with a theoretically integrative synthesis of the political and ideological implications of Ayman al-Zawahiri's personality profile.

With his elevated Scales 5B and 1A, al-Zawahiri emerged from the assessment as a mixed oppositional–controlling type. The oppositional style is an exaggerated—though generally adaptive—variant of the Contentious (negativistic, or passive-aggressive) pattern. The controlling style, similarly, is an exaggerated but generally adaptive variant of the Dominant (aggressive, or sadistic) pattern. The interpretation of al-Zawahiri's profile must also account for more modest elevations on Scales 1B (Dauntless) and 2 (Ambitious). The former elevation reflects a less maladaptive (perhaps socially sublimated) antisocial tendency; the latter a somewhat exaggerated, though generally adaptive, narcissistic tendency.

Scale 5B: The Contentious Pattern

The Contentious pattern, as do all personality patterns, occurs on a continuum ranging from normal to maladaptive. At the well-adjusted pole are cynical, headstrong, resolute personalities. Exaggerated Contentious features occur in complaining, irksome, oppositional personalities. In its most deeply ingrained, inflexible form, the Contentious pattern displays itself in caustic, contrary, negativistic behavior patterns. Ayman al-Zawahiri's loading on Scale 5B classifies him as an oppositional type, a generally adaptive though exaggerated variant of the Contentious pattern.

Normal, adaptive variants of the Contentious pattern (i.e., resolute and oppositional types) correspond to Strack's (1997) *sensitive* style and Millon's (1994) *Complaining* pattern. Empirically, Millon's (1994) Complaining pattern has a high positive correlation with the five-factor model's *Neuroticism* factor, is negatively correlated with its *Agreeableness* factor, has a small negative correlation with its *Extraversion* factor, and is uncorrelated with the remaining two factors (Millon, 1994, p. 82). Millon (1994)⁵ describes the Complaining pattern as follows:

⁴ In each case the label preceding the slash signifies the categorical personality pattern, whereas the label following the slash indicates the specific scale gradation, or personality type, on the dimensional continuum; see Table 2.

⁵ All Millon 1994 citations in this report refer to the Manual of the *Millon Index of Personality Styles* (MIPS). Copyright © 1994 by Dicandrien, Inc. "MIPS" is a trademark of The Psychological Corporation registered in the United States of America and/or other jurisdictions. Reproduced by permission of the publisher, The Psychological

Those scoring high on the Complaining [Contentious] scale often assert that they have been treated unfairly, that little of what they have done has been appreciated, and that they have been blamed for things that they did not do. Opportunities seem not to have worked out well for them and they “know” that good things don’t last. Often resentful of what they see as unfair demands placed on them, they may be disinclined to carry out responsibilities as well as they could. Ambivalent about their lives and relationships, they may get into problematic wrangles and disappointments as they vacillate between acceptance one time and resistance the next. When matters go well, they can be productive and constructively independent-minded, willing to speak out to remedy troublesome issues. (p. 34)

Stephen Strack (1997) provides the following portrait of the normal (*sensitive*) prototype of the Contentious pattern, based on Millon’s theory, empirical findings from studies associating his Personality Adjective Check List (PACL; 1991) scales with other measures, and clinical experience with the test:

Sensitive [Contentious] personalities tend to be unconventional and individualistic in their response to the world. They march to the beat of a different drummer and are frequently unhappy with the status quo. They may be quick to challenge rules or authority deemed arbitrary and unjust. They may also harbor resentment without expressing it directly and may revert to passive-aggressive behavior to make their feelings known. Many sensitive people feel as if they don’t fit in, and view themselves as lacking in interpersonal skills. In fact, to others they often appear awkward, nervous, or distracted, and seem angry or dissatisfied with themselves and others. They can be indecisive and have fluctuating moods and interests. An air of uncertainty and general dissatisfaction may reflect an underlying dependency and sense of personal inadequacy. With their best side forward, sensitive persons can be spontaneous, creative, and willing to speak out for what they believe in. These qualities make them especially suited to jobs that are not rule-bound, that give them a certain independence from supervision, and that require unusual duties or creative expression. (From Strack, 1997, pp. 490–491, with minor modifications)

Millon’s personality patterns have predictable, reliable, and observable psychological indicators (expressive behavior, interpersonal conduct, cognitive style, mood/temperament, self-image, regulatory mechanisms, object-representations, and morphologic organization). The diagnostic features of the Contentious pattern with respect to each of Millon’s eight attribute domains are summarized below, along with selected illustrative examples of psychodiagnostically relevant data collected from media reports, for the five domains (expressive behavior, interpersonal conduct, cognitive style, mood/temperament, and self-image) assessed by the MIDC.

Expressive behavior. The core diagnostic feature of the expressive acts of Contentious individuals is *nonconformity*; they are individualistic and independent, tend to be **outspoken** or unconventional, and are frequently unhappy with the status quo. Thus, they are quick to **challenge** rules or authority deemed arbitrary and unjust. More exaggerated variants of the Contentious pattern are *resistant*; they are stubborn and **oppositional**, may act in a procrastinating, irksome, or intentionally inefficient manner, and frequently complain of being misunderstood or unappreciated. Individuals who display the most pronounced variant of this pattern are *resentful*; they are obstinate and negativistic, often revealing gratification in demoralizing and undermining the pleasures and aspirations of others. (Adapted from Millon, 1996, pp. 549–550; Strack, 1997, pp. 490–491)

“In Afghanistan, al-Zawahiri has apparently sometimes acted as Bin Laden’s **spokesman**” (Foden, 2001).

“He [al-Zawahiri] gave names for the Americans and **challenged** the Pentagon to deny the account, saying that al Qaeda possessed the soldiers’ badges” (“Bin Laden’s No 2,” 2001).

“He [al-Zawahiri] worked as a paediatrician, but abandoned his practice to follow a path of violent **opposition** to the secular Cairo government” (Blanche, 2001).

In his book, *Ayman al-Zawahiri Kama Areftuh* [Ayman al-Zawahiri As I Knew Him], “Egyptian lawyer Montasser el-Zayat goes so far as to chastise a friend, former cellmate and legal client: . . . ‘Al-Zawahiri,’ he declares, ‘has caused the biggest catastrophe to befall the Islamic movement’ ” (MacLeod, 2002).

Interpersonal conduct. The core diagnostic feature of the interpersonal conduct of Contentious individuals is their *unyielding* manner; they are **superficially acquiescent** but fundamentally determined and resolute, even willful, in their independence strivings. More exaggerated variants of the Contentious pattern are characteristically *obdurate*; they are **oppositional**, recalcitrant, mulish, quarrelsome, or disputatious, often vacillating between contrite acquiescence and assertive, hostile independence, which may be revealed in a pattern of **inconsistent or unpredictable attitudes** and behaviors. Individuals with the most extreme manifestation of this pattern are *truculent*; they are contrary, obstructive, or insolent, chronically complaining and overtly resisting performance demands. At times, they may be **defiant**, sabotaging performance expectations and displaying envy and pique towards those more fortunate. Their acts are concurrently or sequentially obstructive and intolerant of others, and they express predominantly negative, **often incompatible, views and attitudes**. (Millon, 1996, pp. 550–551)

“[Al-Zawahiri’s] great-uncle Mahfouz Azzam, vice president of the opposition Labor Party and a criminal attorney, described him as a devoted family man, with a wife and several children. . . . ‘He’s a decent fellow. He has always been a loving person. He never in his life evoked a clash with another,’ Azzam said. ‘He was a very good family man, very polite and very sensitive’ ” (Miller, 2001).

“Al-Zawahiri appeared in a video alongside Bin Laden, **threatening retaliation** against the US for the imprisonment of Sheikh Omar Abdel Rahman” (Foden, 2001).

“Though al-Zawahiri was a kind, humble and charismatic leader, in [Montasser] el-Zayat’s view, he could also be unforgiving. When he discovered that a member of his jihad organization had also broken down during torture, he had him executed. Another time he punished a colleague for allegedly collaborating with Egyptian intelligence by having the man’s innocent son murdered before his eyes” (MacLeod, 2002).

Continued on next page

Continued from previous page

“He [al-Zawahiri] worked as a paediatrician, but abandoned his practice to follow a path of violent **opposition** to the secular Cairo government” (Blanche, 2001).

“It is no secret the Azzam clan [the maternal branch of Ayman al-Zawahiri’s family] does not lack men in high places. . . . [T]he Azzams include an (indicted) MP, a former governor of Giza and several state counselors and prosecutors. Likewise, the clan is top heavy with senior government administrators and diplomats. Ironically, Egypt’s sitting Supreme State Security Court Chief Justice is himself a [*sic*] Azzam relation of Ayman al-Zawahiri [*sic*], his natty villa guarded round the clock lest he become the next victim of a terrorist attack” (Raafat, 2001).

“In his rare public statements, Dr. Zawahiri has remained extraordinarily **defiant**. ‘Tell the Americans that we are not afraid of the bombardment, threats and acts of aggression,’ he [al-Zawahiri] told the Pakistani reporter in 1998. ‘We suffered and survived Soviet bombings for 10 years in Afghanistan, and we are ready for more sacrifices’ ” (Jehl, 2001; also Blanche, 2001).

“At their trial [for the assassination of Anwar Sadat], he was **defiant**. ‘We are here, the real Islamic front. We are here, the real Islamic opposition against Zionism, communism and imperialism,’ he ranted in a holding cell in court” (Wooten, 2001).

Cognitive Style. The core diagnostic feature of the cognitive style of Contentious individuals is its *freethinking* nature; they are inherently critical, skeptical, cynical, and doubting, with a seemingly ingrained **tendency to question authority**. Their preference for indirect expression of aggressive intent may be reflected in a propensity for sarcasm or barbed humor. More exaggerated variants of the Contentious pattern are habitually *gripping*; they display a questioning, **querulous**, grumbling mindset. Consequently, they tend to approach positive events with disbelief and future possibilities with pessimism, anger, or trepidation. Individuals who display the most pronounced variant of this pattern are overtly *negativistic*; they are disdainful, caustic, and acerbic, displaying a misanthropic view of life and voicing demoralizing or **caustic commentary** toward those experiencing good fortune. (Adapted from Millon, 1996, pp. 551–552)

“For al-Zawahiri, that battle [to overthrow the Egyptian regime] was **against the very world that had produced him**” (Gibson et al., 2001).

“Zawahiri appeared with other conspirators **angrily denouncing** the government” (Miller, 2001).

“In his own recent memoir [*Knights Under the Banner of the Prophet*], al-Zawahiri was especially **scathing** about the lawyer [Montasser el-Zayat, whose book, *Ayman al-Zawahiri As I Knew Him*, was hailed by Mohammed Salah, Cairo correspondent for the London-based Arabic daily Al Hayat, as ‘one of the most important documents in the 25-year history of the jihad movement’] accusing him of abandoning the jihad against the Egyptian government as well as Israel” (MacLeod, 2002).

Mood/temperament. The core diagnostic feature of the characteristic mood and temperament of Contentious individuals is *moodiness*; they are typically **sensitive** or discontented. Owing to their hypersensitivity, their emotional equilibrium is easily upset, resulting in frequent displays of pessimistic, distraught, or despondent mood. More exaggerated variants of the Contentious pattern are more overtly touchy and *irritable*; they are testy or petulant, and frequently impatient, nettled, or fretful. They are especially prone to displays of sullen, obstinate, **resentful** moodiness. The most extreme variants of this pattern are chronically *disgruntled*; they are irate, temperamental, agitated, or peevish, followed in turn by sullen and moody withdrawal. They tend to be petulant and impatient, **unreasonably scorn those in authority**, and report being easily annoyed, frustrated, or **disappointed by others**. (Adapted from Millon, 1996, pp. 551–552; Millon & Everly, 1985, p. 33)

“[Al-Zawahiri’s great-uncle Mahfouz Azzam characterized him as ‘very polite and very **sensitive**’ ” (Miller, 2001).

“[According to an acquaintance,] ‘Feelings of hypocrisy and lack of justice and democracy and freedom—this makes people angry. This makes you **bitter** against everyone. . . . You become **hateful** to everybody’ ” (Miller, 2001). [Note: It is unclear whether this could be interpreted as applying to al-Zawahiri.]

“[On trial for his alleged role in the assassination of Anwar Sadat,] Zawahiri appeared with other conspirators **angrily denouncing the government**” (Miller, 2001).

“At their trial [for the assassination of Anwar Sadat], he was defiant. ‘We are here, the real Islamic front. We are here, the real Islamic opposition against Zionism, communism and imperialism,’ he **ranted** in a holding cell in court” (Wooten, 2001).

“[Al-Zawahiri] could also be **unforgiving**. When he discovered that a member of his jihad organization had also broken down during torture, he had him executed. Another time he punished a colleague for allegedly collaborating with Egyptian intelligence by having the man’s innocent son murdered before his eyes” (MacLeod, 2002).

Self-image. The core diagnostic feature of the self-perception of Contentious individuals is *dissatisfaction*; they recognize themselves as being generally discontented or cynical about life. More exaggerated variants of the Contentious pattern feel *disillusioned*; they view themselves as being misunderstood, luckless, **unappreciated**, jinxed, or **demeaned** by others. They may have a pervasive sense of having been wronged or cheated, that little has worked out well for them. The most extreme variants of this pattern experience a deep sense of *discontent*; they recognize themselves as being **embittered**, disgruntled, and **disillusioned** with life. (Adapted from Millon, 1994, p. 33; Millon, 1996, p. 552)

“If numerous aspiring Azzams [the maternal branch of Ayman al-Zawahiri’s family] joined the Arab League earning princely salaries during their uncle’s [Abdelrahman Azzam, whose daughter married the son of King Faisal of Saudi Arabia] heyday, the subsequent introduction of a direct family link to the Saudi monarchy enabled younger members of the clan to make it in the oil-rich kingdom. Others found gainful sinecures in Saudi financed organizations. . . . But Ayman al-Zawahiri [*sic*] was **not one of them**. Was he out of the loop by virtue of his zealotry, or was it Ayman who **shunned** his sheltered and more privileged relations?” (Raafat, 2001).

“[According to an acquaintance,] ‘Feelings of hypocrisy and lack of justice and democracy and freedom—this makes people angry. This makes you **bitter** against everyone. . . . You become hateful to everybody’ ” (Miller, 2001). [Note: It is unclear whether this could be interpreted as applying to al-Zawahiri.]

“After three years in jail, where even the most confirmed secular will turn into a potent militant, Ayman al-Zawahiri [*sic*] closed his modest surgery located in the worn-out section of Maadi, and left for Saudi Arabia a **rancorous** man” (Raafat, 2001).

Regulatory mechanisms. The core diagnostic feature of the unconscious regulatory (i.e., ego-defense) mechanisms of highly Contentious individuals is *displacement*; they discharge anger and other troublesome emotions either precipitously or by employing unconscious maneuvers to shift them from their instigator to settings or persons of lesser significance. As a consequence, they vent disapproval or resentment by substitute or passive means, such as acting inept or perplexed or behaving in a forgetful or indolent manner. (Adapted from Millon, 1996, pp. 552–553)

Object representations. The core diagnostic feature of the internalized object representations of highly Contentious individuals is *vacillation*; internalized representations of the past comprise a complex of countervailing relationships, setting in motion contradictory feelings, conflicting inclinations, and incompatible memories that are driven by the desire to degrade the achievements and pleasures of others, without necessarily appearing so. (Adapted from Millon, 1996, p. 552)

Morphologic organization. The core diagnostic feature of the morphological organization of highly Contentious individuals is its *divergence*; there is a clear division in the pattern of morphologic structures such that coping and defensive maneuvers are often directed toward incompatible goals, leaving major conflicts unresolved and full psychic cohesion often impossible because fulfillment of one drive or need inevitably nullifies or reverses another. (Adapted from Millon, 1996, pp. 553)

Scale 1A: The Dominant Pattern

Few people exhibit personality patterns in pure or prototypal form; more often, individual personalities represent a blend of two or more prevailing orientations. As noted earlier, Ayman al-Zawahiri’s elevation on Scale 1A (Dominant) modulates his predominantly Contentious (Scale 5B) pattern. Al-Zawahiri’s loading on Scale 1A classifies him as a controlling type, a generally adaptive but exaggerated variant of the Dominant pattern.

The Dominant pattern, as do all personality patterns, occurs on a continuum ranging from normal to maladaptive. At the well-adjusted pole are strong-willed, commanding, assertive personalities. Slightly exaggerated Dominant features occur in forceful, intimidating, controlling personalities. In its most deeply ingrained, inflexible form, the Dominant pattern displays itself in domineering, belligerent, aggressive behavior patterns that may be consistent with a clinical diagnosis of sadistic personality disorder.

Normal, adaptive variants of the Dominant pattern (i.e., asserting and controlling types) correspond to Oldham and Morris's (1995) *Aggressive* style, Strack's (1997) *forceful* style, Millon's (1994a) *Controlling* pattern, and the *managerial* segment of Leary's (1957) managerial–autocratic continuum. Millon's Controlling pattern is positively correlated with the five-factor model's *Conscientiousness* factor, has a more modest positive correlation with its *Extraversion* factor, is negatively correlated with its *Agreeableness* and *Neuroticism* factors, and is uncorrelated with its *Openness to Experience* factor (see Millon, 1994, p. 82). Thus, these individuals—though controlling and somewhat disagreeable—tend to be emotionally stable and conscientious. According to Millon (1994), Controlling (i.e., Dominant) individuals

enjoy the power to direct and intimidate others, and to evoke obedience and respect from them. They tend to be tough and unsentimental. . . . [Dominant] types typically make effective leaders, being talented in supervising and persuading others to work for the achievement of common goals. (p. 34)

Oldham and Morris (1995) supplement Millon's description with the following portrait of the normal (*Aggressive*) prototype of the Dominant pattern:

[Dominant individuals] can undertake huge responsibilities without fear of failure. They wield power with ease. They never back away from a fight. . . . When put to the service of the greater good, the Aggressive [Dominant] personality style can inspire a man or woman to great leadership, especially in times of crisis. (p. 345)

Finally, Strack (1997) offers the following description of the normal (*forceful*) prototype of the Dominant pattern:

[Dominant] people seem driven to prove their worthiness. They are characterized by an assertive, dominant, and tough-minded personal style. They tend to be strong-willed, ambitious, competitive, and self-determined. . . . In work settings, these personalities are often driven to excel. They work hard to achieve their goals, are competitive, and do well where they can take control or work independently. In supervisory or leadership positions, these persons usually take charge and see to it that a job gets done. (From Strack, 1997, p. 490, with minor modifications)

As noted before, Millon's personality patterns have predictable, reliable, observable psychological indicators. The diagnostic features of the Dominant pattern with respect to each of Millon's eight attribute domains are summarized below, along with selected illustrative examples of psychodiagnostically relevant data collected from media reports, for the five domains (expressive behavior, interpersonal conduct, cognitive style, mood/temperament, and self-image) assessed by the MIDC.

Expressive behavior. The core diagnostic feature of the expressive acts of Dominant individuals is *assertiveness*; they are tough, strong-willed, **outspoken**, competitive, and

unsentimental. More exaggerated variants of the Dominant pattern are characteristically *forceful*; they are **controlling**, contentious, and at times overbearing, their power-oriented tendencies being evident in occasional intransigence, stubbornness, and coercive behaviors. When they feel strongly about something, these individuals can be quite blunt, brusque, and impatient, with sudden, abrupt outbursts of an unwarranted or precipitous nature. The most extreme variants of this pattern are *aggressive*; they are intimidating, domineering, argumentative, and precipitously belligerent. They derive pleasure from humiliating others and can be quite malicious. For this reason, people often shy away from these personalities, sensing them to be cold, callous, and insensitive to the feelings of others. All variants of this pattern tend to view tender emotions as a sign of weakness, avoid expressions of warmth and intimacy, and are suspicious of gentility, compassion, and kindness. Many insist on being seen as faultless; however, they invariably are inflexible and dogmatic, rarely concede on any issue, even in the face of evidence negating the validity of their position. They have a low frustration threshold and are especially sensitive to reproach or deprecation. When pushed on personal matters, they can become furious and are likely to respond reflexively and often vindictively, especially when feeling humiliated or belittled. Thus, they are easily provoked to attack, their first inclination being to dominate and demean their adversaries. (Adapted from Millon, 1996, pp. 483, 487)

“In Afghanistan, al-Zawahiri has apparently sometimes acted as Bin Laden’s **spokesman**” (Foden, 2001).

“Al-Zawahiri is widely seen by counterterrorism and Islamic specialists as the intellect and ideological **driving force** behind the organisation” (Blanche, 2001).

“Zawahiri is a brilliant and **forceful** intellect, the man who provides much of the ideological and strategic grounding to bin Laden’s war against the West, according to friends, family and terrorism experts” (Miller, 2001).

“According to some analysts, al-Zawahiri helped turn bin Laden from a financial backer of the Afghan resistance into a strong believer in the ideology of *jihad* ” (Wooten, 2001).

“The vision of worldwide jihad is one that al-Zawahiri has imparted steadily to bin Laden since 1985” (Gibson et al., 2001).

“Some analysts believe that in his current role in Afghanistan, al-Zawahiri has taken over **control** of much of Bin Laden’s terrorist finances, operations, plans and resources” (Foden, 2001).

“That distinction [of al-Zawahiri as the tactical chief of al-Qaida and bin Laden as its paymaster] has become all the more interesting since Sept. 11. Mr. bin Laden has been identified by the Bush administration as the mastermind and sponsor of terrorist attacks including those against the World Trade Center and the Pentagon. Dr. Zawahiri . . . has been portrayed as Mr. bin Laden’s lieutenant. But Egyptian experts on terrorism said Dr. Zawahiri had been **far more important than the rank would suggest**” (Sachs & Kifner, 2001).

Continued on next page

Continued from previous page

“[According to Montasser el-Zayat,] Ayman **controlled** Osama completely. He convinced him of the principles of jihad” (Gibson et al., 2001).

“Over the past two decades, he [al-Zawahiri] has had a hand in some of the most **murderous** terrorist attacks in the world” (Gibson et al., 2001).

In his book, *Ayman al-Zawahiri Kama Areftuh* [Ayman al-Zawahiri As I Knew Him], Egyptian lawyer Montasser el-Zayat “puts al-Zawahiri on the psychiatrist’s couch, revealing that he once succumbed to torture by Egyptian security forces and ratted on comrades, including one who was later executed. The shame, el-Zayat says, helped push al-Zawahiri to leave the country after his release and move to Afghanistan’ ” (MacLeod, 2002).

Interpersonal conduct. The core diagnostic feature of the interpersonal conduct of Dominant individuals is their *commanding* presence; they are powerful, **authoritative**, directive, and **persuasive**. More exaggerated variants of the Dominant pattern are characteristically *intimidating*; they tend to be abrasive, contentious, coercive, and combative, often **dictate** to others, and are willing and able to humiliate others to evoke compliance. Their strategy of **assertion** and **dominance** has an important instrumental purpose in interpersonal relations, as most people are intimidated by hostility, sarcasm, criticism, and **threats**. Thus, these personalities **are adept at having their way** by browbeating others into respect and submission. The most extreme variants of this pattern are *belligerent*; they reveal satisfaction in intimidating, coercing, and humiliating others. Individuals with all gradations of this pattern frequently find a successful niche for themselves in roles where hostile and **belligerent** behaviors are socially sanctioned or admired, thus providing an outlet for vengeful hostility cloaked in the guise of social responsibility. (Adapted from Millon, 1996, p. 484; Millon & Everly, 1985, p. 32)

“ ‘Al-Zawahiri’s experience is much broader than even Bin Laden’s,’ said Dia’a Rashwan, one of Egypt’s top experts on militants [at Cairo’s Al Ahram Center for Political and Strategic Studies]. ‘**His name has come up in nearly every case** involving Muslim extremists since the 1970’s’ ” (Jehl, 2001; also Blanche, 2001).

“Several [defendants in the 1999 Egyptian terror trial] said Dr. Zawahiri was their **leader**, arranging for forged passports to ease their travels between Yemen, Afghanistan and Sudan” (Sachs & Kifner, 2001).

“According to some analysts, al-Zawahiri helped turn bin Laden from a financial backer of the Afghan resistance into a strong believer in the ideology of *jihad*” (Wooten, 2001).

Continued on next page

Continued from previous page

“The vision of worldwide jihad is one that al-Zawahiri has imparted steadily to bin Laden since 1985” (Gibson et al., 2001).

“He’s the **chief ideologue** in the Bin Laden group. Both he and Bin Laden have combat experience, but it’s Ayman who has the intellectual edge” (Blanche, 2001).

“Dr. Zawahiri . . . is viewed as the man who **convinced** Mr. bin Laden to undertake a kind of death match against Western civilization by transforming his worldwide movement of Islamic militants into an instrument of mass murder” (MacFarquhar, 2001).

“He **convinced** bin Laden of the need for armed action to establish Islamic states in other Muslim countries. One associate told *Al Sharq al Awsat*, the influential Saudi-owned newspaper in London, that Zawahiri gained **great influence** over bin Laden” (Miller, 2001).

“Muntasir Zayyat [*sic*], an attorney who defended Zawahiri on terrorist charges in Egypt in 1999, told . . . [*Al-Sharq al-Awsat* that al-Zawahiri] . . . ‘**was able to reshape bin Laden’s thinking** and mentality and turn him from merely a supporter of the Afghan jihad to a believer in and exporter of the jihad ideology’ ” (Miller, 2001).

“Early on, al-Zawahiri also **installed at bin Laden’s side his own faithful lieutenant**, Mohamed Atef [note: killed in U.S. bombing in Afghanistan], who serves bin Laden as both a military commander and personal security chief” (Gibson et al., 2001).

“[Zawahiri, in his autobiography, *Knights Under the Banner of the Prophet*:] ‘This book is a **warning** for the evil powers targeting our nation that your defeat draws nearer daily and we are taking step after step to **retaliate** against you and that your fight with the nation is doomed to defeat and all you efforts will come to nothing but merely postpone the inevitable victory of our nation’ ” (MacFarquhar, 2001).

Cognitive style. The core diagnostic feature of the cognitive style of Dominant individuals is its *opinionated* nature; they are **outspoken**, emphatic, and adamant, **holding strong beliefs that they vigorously defend**. More exaggerated variants of the Dominant pattern tend to be *dogmatic*; they are **inflexible** and closed-minded, lacking objectivity and clinging obstinately to preconceived ideas, beliefs, and values. The most extreme variants of this pattern are narrow-mindedly *bigoted*; they are **socially intolerant** and inherently prejudiced, especially toward envied or derogated social groups. Some of these individuals have a crude, callous exterior and seem coarsely unperceptive. This notwithstanding, all variants of this pattern are finely attuned to the subtle elements of human interaction, keenly aware of the moods and feelings of others, and skilled at using others’ foibles and sensitivities to manipulate them for their own purposes. The more extreme variants of this pattern, in particular, are quick to turn another’s perceived weaknesses to their own advantage—often in an intentionally callous manner—by upsetting the other’s equilibrium in their quest to dominate and **control**. (Adapted from Millon, 1996, pp. 484–485)

“In Afghanistan, al-Zawahiri has apparently sometimes acted as Bin Laden’s **spokesman**” (Foden, 2001).

“ ‘**For his cause**, he would embrace death more than we would embrace life,’ says [Mohammad] Salah [a reporter for *Al Hayat*] in Arabic. ‘He doesn’t care if he dies’ ” (Wooten, 2001).

“[According to Yasser Serri, an Islamic activist in London,] ‘Zawahiri joined al-Qaida because **he believes in it** and it is in line with his own philosophy. . . . He believes that U.S. policy is causing a lot of problems in the Middle East and Islamic countries’ ” (Miller, 2001).

“Some analysts believe that in his current role in Afghanistan, al-Zawahiri has taken over **control** of much of Bin Laden’s terrorist finances, operations, plans and resources” (Foden, 2001).

“[According to Montasser el-Zayat,] Ayman **controlled** Osama completely. He convinced him of the principles of jihad” (Gibson et al., 2001).

“ ‘According to him [al-Zawahiri] the majority of Muslims around the world are not Muslim,’ says [Azzam] Tamimi [director of the Institute of Islamic Political Thought in London]. ‘**His ideas negate the existence of common ground with others**, irrespective of their religion. Life for him is a continuous conflict with “the Other” ’ ” (Gibson et al., 2001).

“[Zawahiri, in his autobiography, *Knights Under the Banner of the Prophet*:] ‘I wanted to show in this book some of the details of this epic [battle against the international powers of blasphemy united against the mujahideen] and to warn readers of this book that **hidden enemies and their wolves and foxes** are on the road and you should be wary of them” (MacFarquhar, 2001).

Mood/temperament. The core diagnostic feature of the characteristic mood and temperament of Dominant individuals is *irritability*; they have an **excitable temper** that they may at times find difficult to control. More exaggerated variants of the Dominant pattern tend to be *cold* and unfriendly; they are disinclined to experience and express tender feelings, and have a volatile temper that flares readily into contentious argument and **physical belligerence**. The most extreme variants of this pattern evince pervasive *hostility* and **anger**; they are fractious, mean-spirited, and **malicious**, with callous disregard for the rights of others. Their volcanic temper seems perpetually primed to erupt, sometimes into physical belligerence. More than any other personality type, people with this extreme variant of the Dominant pattern are **willing to do harm and persecute others** if necessary to have their way. All variants of this pattern are **prone to anger** and to a greater or lesser extent deficient in the capacity to share warm or tender feelings, to experience genuine affection and love for another, or to empathize with the needs of others. (Adapted from Millon, 1996, p. 486; Millon & Everly, 1985, p. 32)

“At their trial [for the assassination of Anwar Sadat], he was defiant. ‘We are here, the real Islamic front. We are here, the real Islamic opposition against Zionism, communism and imperialism,’ he **ranted** in a holding cell in court” (Wooten, 2001).

“Zawahiri appeared with other conspirators **angrily** denouncing the government” (Miller, 2001).

“He [al-Zawahiri] helped fund and organize the **attack** on the Egyptian embassy in Islamabad in 1995” (Wooten, 2001).

“He [al-Zawahiri] served three years in prison in Egypt on charges connected to the 1981 **assassination** of Egyptian President Anwar Sadat” (Wooten, 2001).

“He [al-Zawahiri] is suspected of helping organize the 1997 **massacre** of 67 foreign tourists in the Egyptian town of Luxor” (Wooten, 2001).

“There is a \$5 million reward for this doctor, who was trained to save lives and now is wanted for **killing** thousands” (Wooten, 2001).

Self-image. The core diagnostic feature of the self-image of Dominant individuals is that they view themselves as *assertive*; they perceive themselves as forthright, **unsentimental**, and bold. More exaggerated variants of the Dominant pattern recognize their fundamentally *competitive* nature; they are strong-willed, energetic, and commanding, and may take pride in describing themselves as tough and realistically hardheaded. More exaggerated variants of the Dominant pattern perceive themselves as *powerful*; they are combative, viewing themselves as self-reliant, **unyielding**, and strong—hard-boiled, perhaps, but **unflinching**, honest, and realistic. They seem proud to characterize themselves as competitive, vigorous, and militantly hardheaded, which is consistent of their “dog-eat-dog” view of the world. Though more extreme variants may enhance their sense of self by overvaluing aspects of themselves that present a pugnacious, domineering, and power-oriented image, it is rare for these personalities to acknowledge malicious or vindictive motives. Thus, hostile behavior on their part is typically framed in prosocial terms, which enhances their sense of self. (Adapted from Millon, 1996, p. 485; Millon & Everly, 1985, p. 32)

“When he [al-Zawahiri] discovered that a member of his jihad organization had also broken down during torture, he had him executed. Another time he punished a colleague for allegedly collaborating with Egyptian intelligence by **having the man’s innocent son murdered** before his eyes” (MacLeod, 2002).

“ ‘Tell the Americans that we are **not afraid** of the bombardment, threats and acts of aggression,’ he [al-Zawahiri] told the Pakistani reporter in 1998. ‘We suffered and survived Soviet bombings for 10 years in Afghanistan, and **we are ready for more sacrifices**’ ” (Jehl, 2001; also Blanche, 2001).

Regulatory mechanisms. The core diagnostic feature of the regulatory (i.e., ego-defense) mechanisms of highly Dominant individuals is *isolation*; they are able to detach themselves emotionally from the impact of their aggressive acts upon others. In some situations—politics being a case in point—these personalities may have learned that there are times when it is best to restrain and transmute their more aggressive thoughts and feelings. Thus, they may soften and redirect their hostility, typically by employing the mechanisms of *rationalization*, *sublimation*, and *projection*, all of which lend themselves in some fashion to finding plausible and socially acceptable excuses for less than admirable impulses and actions. Thus, blunt directness may be rationalized as signifying frankness and honesty, a lack of hypocrisy, and a willingness to face issues head on. On the longer term, socially sanctioned resolution (i.e., sublimation) of hostile urges is seen in the competitive occupations to which these aggressive personalities gravitate. Finally, these personalities may preempt the disapproval they anticipate from others by projecting their hostility onto them, thereby justifying their aggressive actions as mere counteraction to unjust persecution. Individuals with extreme, malignant variations of this pattern may engage in group scapegoating, viewing the objects of their violations impersonally as despised symbols of a devalued people, empty of dignity and deserving degradation. (Adapted from Millon, 1996, pp. 485–486)

Object representations. The core diagnostic feature of the internalized object representations of highly Dominant individuals is their *pernicious* nature. Characteristically, there is a marked paucity of tender and sentimental objects, and an underdevelopment of images that activate feelings of shame or guilt. The inner templates that guide the perceptions and behaviors of individuals with extreme, malignant variations of this pattern are composed of aggressive feelings and memories, and images comprising harsh relationships and malicious attitudes. Consequently, their life experience is recast to reflect the expectancy of hostility and the need to preempt it. These dynamics undergird a “jungle philosophy” of life where the only perceived recourse is to act in a bold, critical, assertive, and ruthless manner. Of particular relevance to politics is the harsh, antihumanistic disposition of the more extreme variants of these personalities. Some are adept at pointing out the hypocrisy and ineffectuality of so-called “do-gooders”; they rail against the devastating consequences of international appeasement. Others justify their toughness and cunning by pointing to the hostile and exploitative behavior of others; to them, the only way to survive in this world is to dominate and control. (Adapted from Millon, 1996, p. 485)

Morphologic organization. The core diagnostic feature of the morphologic organization of highly Dominant individuals is its *eruptiveness*; powerful energies are so forceful that they periodically overwhelm these personalities’ otherwise adequate modulating controls, defense operations, and expressive channels, resulting in the harsh behavior commonly seen in these personalities. This tendency is exacerbated by the unrestrained expression of intense and explosive emotions stemming from early life experiences. Moreover, these personalities dread the thought of being vulnerable, of being deceived, and of being humiliated. Viewing people as basically ruthless, these personalities are driven to gain power over others, to dominate them and outmaneuver or outfox them at their own game. Personal feelings are regarded as a sign of weakness and dismissed as mere maudlin sentimentality. (Adapted from Millon, 1996, p. 486)

Scale 1B: The Dauntless Pattern

It can often prove productive to examine less elevated scales that, although not of primary significance, nonetheless appear to play a secondary role in the individual's overall personality configuration. Such is the case with Ayman al-Zawahiri's elevation on Scale 1B (Dauntless), which presumably modulates his more prevailing Contentious-Dominant mixed personality pattern. Al-Zawahiri's loading on Scale 1B is just within the *prominent* but generally adaptive (i.e., dissenting) range of the Dauntless pattern.

Given al-Zawahiri's primary Dominant (Scale 1A) orientation, along with a secondary Ambitious (Scale 2) orientation, his elevation on Scale 1B is not surprising; all three of these personality patterns are prototypically self-oriented orientations characterized by strong independence strivings (see Millon, 1986a).

Normal, adaptive variants of the Dauntless pattern (i.e., venturesome and dissenting types) correspond to Oldham and Morris's (1995) *Adventurous* style, Millon's (1994) *Dissenting* pattern, and the low pole of Simonton's (1988) *interpersonal* executive leadership style. Theoretically, the normal, adaptive variant of the Dauntless pattern incorporates facets of the five-factor model's *Extraversion* factor and the low pole of its *Agreeableness* factor; however, the Dissenting scale of the Millon Index of Personality Styles (Millon, 1994) is uncorrelated with the NEO Personality Inventory's (Costa & McCrae, 1985) *Extraversion* factor, though, as expected, it is negatively correlated with its *Agreeableness* factor. In addition, the Dissenting scale is moderately correlated with the NEO Personality Inventory's *Neuroticism* factor, has a small negative correlation with its *Conscientiousness* factor, and is uncorrelated with its *Openness to Experience* factor (see Millon, 1994, p. 82). The Dauntless pattern, as conceptualized in the MIDC, is congruent with the low poles of Simonton's (1988) *deliberative* and *interpersonal* leadership styles and incorporates elements of his *neurotic* and *charismatic* styles.

According to Oldham and Morris (1995, pp. 227–228), the following eight traits and behaviors are reliable clues to the presence of an Adventurous style:

1. *Nonconformity*. Live by their own internal code of values; not strongly influenced by the norms of society.
2. *Challenge*. Routinely engage in high-risk activities.
3. *Mutual independence*. Not overly concerned about others; expect each individual to be responsible for him- or herself.
4. *Persuasiveness*. "Silver-tongued" charmers talented in the art of social influence.
5. *Wanderlust*. Like to keep moving; live by their talents, skills, ingenuity, and wits.
6. *Wild oats*. History of childhood and adolescent mischief and hell-raising.
7. *True grit*. Courageous, physically bold, and tough.
8. *No regrets*. Live in the present; do not feel guilty about the past or anxious about the future.

It should be noted that Adventurous (Oldham & Morris, 1995) and Dissenting (Millon, 1994) personalities are adaptive variants of antisocial personality disorder. Perhaps by dint of more favorable socialization experiences these more adaptive styles express themselves "in behaviors that are minimally obtrusive, especially when manifested in sublimated forms, such as

independence strivings, ambition, competition, risk-taking, and adventuresomeness” (Millon, 1996, p. 449).

Ultimately, adventurous types “are fundamentally out for themselves” (Oldham & Morris, 1995, p. 228); they “do not need others to fuel their self-esteem or to provide purpose to their lives, and they don’t make sacrifices for other people, at least not easily” (p. 229). Furthermore, they believe in themselves and do not require anyone’s approval; they have “a definite sense of what is right or wrong for them, and if something is important to them, they’ll do it no matter what anyone thinks” (p. 229). In spite of their self-centeredness, however, adventurous people are capable of advancing a cause incidentally in the service of their personal desires or ambition; but, fundamentally, what matters is the momentary excitement, emotional vitality, or sense of aliveness that they experience, not love of person, country, or cause (p. 229).

Millon (1994), who uses the term *Dissenting* as a label for the normal, adaptive variant of the aggrandizing, antisocial pattern, asserts that these individuals tend to “flout tradition,” “act in a notably autonomous fashion,” “are not social-minded,” and “are not inclined to adhere to conventional standards, cultural mores, and organizational regulations” (p. 32). They are

unconventional persons who seek to do things their own way and are willing to take the consequences for doing so. They act as they see fit regardless of how others judge them. Inclined at times to elaborate on or shade the truth, as well as ride close to the edge of the law, they are not conscientious—that is, they do not assume customary responsibilities. Rather, they frequently assert that too many rules stand in the way of people who wish to be free and inventive, and that they prefer to think and act in an independent and often creative way. Many believe that persons in authority are too hard on people who don’t conform. Dissenters dislike following the same routine day after day and, at times, act impulsively and irresponsibly. They will do what they want or believe to be best without much concern for the effects of their actions on others. Being skeptical about the motives of most people, and refusing to be fettered or coerced, they exhibit a strong need for autonomy and self-determination. (p. 33)

Millon and Davis (2000) specifically address the relevance of the Dauntless pattern to leadership—notably the intermediate range of the continuum, where normality shades into the more aggrandizing, antisocial variant of this pattern. They suggest that within this range “we find persons [e.g., some very successful industrialists, entrepreneurs, and corporate executives] who have never come into conflict with the law, but only because they are very effective in covering their tracks” (p. 107). Millon (1996), in examining the developmental background of these so-called “socially sublimated antisocials” (p. 462), asserts that their experiential history is often characterized by secondary status in the family. He writes:

It is not only in socially underprivileged families or underclass communities that we see the emergence of antisocial individuals. The key problem for all has been their failure to experience the feeling of being treated fairly and having been viewed as a person/child of value in the family context. Such situations occur in many middle- and upper-middle class families. Here, parents may have given special attention to another sibling who was admired and highly esteemed, at least in the eyes of the “deprived” youngster. (p. 462)

As noted earlier, Millon’s personality patterns have well-established diagnostic indicators associated with each of the eight attribute domains of expressive behavior, interpersonal conduct, cognitive style, mood/temperament, self-image, regulatory mechanisms, object-representations,

and morphologic organization. The diagnostic features of the Dauntless pattern with respect to each of these attribute domains are summarized below, along with selected illustrative examples of psychodiagnostically relevant data (from the five observable domains assessed by the MIDC) collected from media reports. It must be noted, however, that owing to the clinical emphasis of his model, the following summary of Millon's attribute domains with reference to the Dauntless pattern emphasizes the maladaptive, aggrandizing pole of the venturesome–dissenting–aggrandizing continuum. Thus, in some cases the diagnostic features outlined below will be attenuated, less pronounced and more adaptive, in the case of al-Zawahiri. Nonetheless, the Dauntless elements in al-Zawahiri's profile are hypothesized to play an important modulating role with respect to his predominantly Contentious–Dominant personality pattern.

Expressive behavior. Dauntless personalities are typically adventurous, **fearless**, and daring, attracted by challenge and **undeterred** by personal risk. They do things their own way and are **willing to take the consequences**. They often **act hastily** and spontaneously, failing to plan ahead or heed consequences, making **spur-of-the-moment decisions** without carefully considering alternatives. This penchant for shooting from the hip can signify boldness and the courage of one's convictions as easily as it may constitute shortsighted imprudence and poor judgment. (Adapted from Millon, 1996, pp. 444–445, 449–450; Millon & Davis, 1998, p. 164)

“After the [1998 embassy] bombings [in east Africa], the U.S. struck back with cruise missiles. Zawahiri was **undaunted**. Speaking by satellite phone, he told a [Los Angeles] Times reporter that further attacks lay in the future” (Miller, 2001).

“ ‘Tell the Americans that we are **not afraid** of the bombardment, threats and acts of aggression,’ he [al-Zawahiri] told the Pakistani reporter in 1998” (Jehl, 2001; also Blanche, 2001).

“ ‘For his cause, **he would embrace death** more than we would embrace life,’ says [Mohammad] Salah [a reporter for *Al Hayat*] in Arabic. ‘He doesn't care if he dies’ ” (Wooten, 2001).

“[Zawahiri, in his autobiography, *Knights Under the Banner of the Prophet*:] ‘I was working in a temporary job in one of the Muslim Brotherhood clinics. . . . One night the head of the clinic, who was a Muslim brother, asked me about going to Pakistan to help the Afghan refugees. I **immediately agreed**’ ” (MacFarquhar, 2001).

Interpersonal conduct. Dauntless personalities are rugged individualists, not compromisers or conciliators. They take clear stands on the issues that matter, backed up by the self-confidence and personal skills and talents to prevail. Though generally jovial and convivial, they become **confrontational** and **defiant** when obstructed or crossed. (Adapted from Millon, 1996, pp. 445–446, 449–450; Millon & Davis, 1998, p. 164)

“The London-based al-Majallah magazine. . . [quoted al-Zawahiri] as saying: ‘[W]e **do not run away from confrontation**’ ” (“Bin Laden’s no. 2,” 2001).

“At their trial [for the assassination of Anwar Sadat], he was **defiant**. ‘We are here, the real Islamic front. We are here, the real Islamic opposition against Zionism, communism and imperialism,’ he ranted in a holding cell in court” (Wooten, 2001).

“But in his rare public statements, Dr. Zawahiri has remained **extraordinarily defiant**” (Jehl, 2001).

Cognitive style. Dauntless personalities are original, independent-minded, and unconventional. At their best, these personalities are **enterprising, innovative, and creative**. They are nonconformists first and foremost, disdainful—even contemptuous—of traditional ideals and values. Moreover, Dauntless personalities shirk orthodoxy and typically believe that too many rules stand in the way of freedom. (Adapted from Millon, 1996, pp. 446–447, 449–450; Millon & Davis, 1998, p. 164)

“After his release in 1984, Zawahiri **opened a medical clinic** in the Cairo suburb of Maadi” (Miller, 2001).

“He [al-Zawahiri] knows how to **set up independent cells** that work underground” (Sachs & Kifner, 2001).

“One of its [al-Qaida’s] top commanders [al-Zawahiri] slipped into the United States [in 1995] and embarked on a coast-to-coast **fund-raising tour**” (Sachs & Kifner, 2001).

“He was a paediatrician, but gave up medical work to **launch a campaign** of violence against the Egyptian government” (Foden, 2001).

“Ayman al-Zawahiri has **never been one to think small**” (Gibson et al., 2001).

“By the early 1990s Zawahiri was hard at work to **expand the resources and scope** of the Egyptian Islamic Jihad” (Miller, 2001).

“. . . in Afghanistan and Pakistan, working under primitive conditions (his uncle said Zawahiri had to use honey to sterilize wounds)” (Miller, 2001).

Mood/Temperament. Dauntless personalities are untroubled and easygoing, but quickly become irritable and aggressive when crossed. They are cool, **calm**, and collected under pressure, restless and disgruntled when restricted or confined. They are **tough-minded** and unsentimental. They **display their feelings openly** and directly. (Adapted from Millon, 1996, pp. 448–449, 449–450; Millon & Davis, 1998, p. 164)

“**Placid** looking” (Gibson et al., 2001).

“In [Montasser] el-Zayat’s view, he [al- Zawahiri] could . . . be **unforgiving**. When he discovered that a member of his jihad organization had . . . broken down during torture, he had him executed. Another time he punished a colleague for allegedly collaborating with Egyptian intelligence by having the man’s innocent son murdered before his eyes” (MacLeod, 2002).

“Zawahiri appeared with other conspirators **angrily denouncing** the government” (Miller, 2001).

Self-image. Dauntless personalities are self-confident, with a corresponding view of themselves as **self-sufficient** and autonomous. They **pride themselves** on their independence, competence, strength, and their ability to prevail without social support, and they **expect the same of others** (Adapted from Millon, 1996, pp. 447, 449–450; Millon & Davis, 1998, p. 164)

“Ayman al-Zawahiri has never been one to think small” (Gibson et al., 2001).

“Dr. Zawahiri writes with **swagger** about his certainty that the ‘Islamic nation’ will triumph” (MacFarquhar, 2001).

“[Zawahiri, in his autobiography, *Knights Under the Banner of the Prophet*:] ‘This book is an attempt to revive the consciousness of the Islamic nation, to tell them about their duties and how important these duties are and how the new crusaders hate Muslims and the importance of understanding the difference between our enemies and our friends’ (MacFarquhar, 2001).

Regulatory mechanisms. Dauntless personalities are unconstrained. They express their impulses directly, often in rash and precipitous fashion, and generally without regret or remorse. They rarely refashion their thoughts and actions to fit a socially desirable mold. (Adapted from Millon, 1996, p. 448)

Object representations. Dauntless personalities are driven by restive impulses to discredit established cultural ideals and mores, yet are skilled in arrogating for themselves what material spoils they can garner from society. Though fundamentally driven by self-serving motives, they are capable of incidentally advancing social causes in the service of their own ambition. (Adapted from Millon, 1996, p. 447)

Morphologic organization. The inner drives and impulses of Dauntless personalities are unruly, recalcitrant, and rebellious, which gives rise to unfettered self-expression, a marked intolerance of delay or frustration, and low thresholds for emotional discharge, particularly those of a hostile nature. (Adapted from Millon, 1996, p. 448)

Scale 2: The Ambitious Pattern

In interpreting al-Zawahiri's profile, some consideration should also be given to his secondary elevation on Scale 2 (Ambitious), which likely modulates his primary Contentious–Dominant personality composite. Al-Zawahiri's Scale 2 elevation is just within the *prominent* but generally adaptive (i.e., self-serving) range of the Ambitious pattern.

The Ambitious pattern, as do all personality patterns, occurs on a continuum ranging from normal to maladaptive. At the well-adjusted pole are confident, socially poised, assertive personalities. Slightly exaggerated Ambitious features occur in personalities that are sometimes perceived as self-promoting, overconfident, or arrogant. In its most deeply ingrained, inflexible form, the Ambitious pattern manifests itself in extreme self-absorption or exploitative behavior patterns that may be consistent with a clinical diagnosis of narcissistic personality disorder.

Normal, adaptive variants of the Ambitious pattern (i.e., confident and self-serving types) correspond to Oldham and Morris's (1995) *Self-Confident* style, Strack's (1997) *confident* style, and Millon's (1994) *Asserting* pattern. Millon's Asserting pattern is positively correlated with the five-factor model's *Extraversion* and *Conscientiousness* factors and negatively correlated with its *Neuroticism* factor (Millon, 1994, p. 82). It is associated with "social composure, or poise, self-possession, equanimity, and stability"—a constellation of adaptive traits that in stronger doses shades into its dysfunctional variant, the narcissistic personality (Millon, 1994, p. 32). In combination with an elevated Outgoing pattern (Scale 3; absent in the case of al-Zawahiri), it bears some resemblance to Simonton's (1988) *charismatic* executive leadership style.

Millon (1994) summarizes the Asserting (i.e., Ambitious) pattern as follows:

An interpersonal boldness, stemming from a belief in themselves and their talents, characterize[s] those high on the . . . Asserting [Ambitious] scale. Competitive, ambitious, and self-assured, they naturally assume positions of leadership, act in a decisive and unwavering manner, and expect others to recognize their special qualities and cater to them. Beyond being self-confident, those with an Asserting [Ambitious] profile often are audacious, clever, and persuasive, having sufficient charm to win others over to their own causes and purposes. Problematic in this regard may be their lack of social reciprocity and their sense of entitlement—their assumption that what they wish for is their due. On the other hand, their ambitions often succeed, and they typically prove to be effective leaders. (p. 32)

Oldham and Morris (1995) offer the following portrait of the normal (*Self-Confident*) prototype of the Ambitious pattern:

Self-Confident [Ambitious] individuals stand out. They're the leaders, the shining lights, the attention-getters in their public or private spheres. Theirs is a star quality born of self-regard, self-respect, self-certainty—all those *self* words that denote a faith in oneself and a commitment to one's self-styled purpose. Combined with the ambition that marks this style, that . . . self-regard can transform idle dreams into real accomplishment. . . . Self-Confident [Ambitious] men and women know what they want, and they get it. Many of them have the charisma to attract plenty of others to their goals. They are extroverted and intensely political. They know how to work the crowd, how to motivate it, and how to lead it. (p. 85)

Finally, Stephen Strack (1997) provides the following description of the normal (*confident*) prototype of the Ambitious pattern, based on Millon's theory, empirical findings from studies correlating his Personality Adjective Check List (PACL; 1991) scales with other measures, and clinical experience with the instrument:

Aloof, calm, and confident, these personalities tend to be egocentric and self-reliant. They may have a keen sense of their own importance, uniqueness, or entitlement. Confident [Ambitious] individuals enjoy others' attention and may be quite bold socially, although they are seldom garish. They can be self-centered to a fault and may become so preoccupied with themselves that they lack concern and empathy for others. These persons have a tendency to believe that others share, or should share, their sense of worth. As a result, they may expect others to submit to their wishes and desires, and to cater to them. Ironically, the confident [Ambitious] individual's secure appearance may cover feelings of personal inadequacy and a sensitivity to criticism and rejection. Unfortunately, they usually do not permit others to see their vulnerable side. When feeling exposed or undermined these individuals are frequently disdainful, obstructive, or vindictive. In the workplace, confident [Ambitious] persons like to take charge in an emphatic manner, often doing so in a way that instills confidence in others. Their self-assurance, wit, and charm often win them supervisory and leadership positions. (From Strack, 1997, pp. 489–490, with slight modifications)

Millon's (1996) attribute domains accentuate the maladaptive range of the personality patterns in his taxonomy—in the case of the Ambitious pattern, the exploitative pole of the confident–self-serving–exploitative continuum. The diagnostic features of the Ambitious pattern with respect to each of Millon's eight attribute domains are summarized below, along with selected illustrative examples of psychodiagnostically relevant data collected from media reports, for the five domains assessed by the MIDC. Given the secondary status of the Ambitious pattern in al-Zawahiri's profile, the more extreme features are less likely to figure centrally in his personality functioning.

Expressive behavior. The core diagnostic feature of the expressive acts of Ambitious individuals is their *confidence*; they are **socially poised, self-assured**, and self-confident, conveying an air of **calm**, untroubled self-assurance. More exaggerated variants of the Ambitious pattern tend to act in a *conceited* manner, their natural self-assurance shading into supreme self-confidence, hubris, **immodesty**, or presumptuousness. They are self-promoting and may display an **inflated sense of self-importance**. They typically have a superior, supercilious, imperious, haughty, disdainful manner. Characteristically, though usually unwittingly, they **exploit others**, take them for granted, and frequently act as though entitled. The most extreme variants of this pattern are *arrogant*; they are self-serving, reveal a **self-important indifference to the rights of others**, and are **manipulative and lacking in integrity**. They commonly flout conventional rules of shared social living, which they view as naive or inapplicable to themselves. All variants of this pattern are to some degree self-centered centered and lacking in generosity and social reciprocity. (Adapted from Millon, 1996, p. 405; Millon & Everly, 1985, pp. 32, 39)

“**Placid** looking” (Gibson et al., 2001).

“Relatives remember him as being **polite, composed**, well read and **even funny**” (Gibson et al., 2001).

Continued on next page

Continued from previous page

“Dr. Zawahiri writes with **swagger** about his **certainty** that the ‘Islamic nation’ will triumph” (MacFarquhar, 2001).

“Asked in 1993 when he might return to Egypt, Dr. Zawahiri told the London-based newspaper Al Hayat, ‘**I will be back as a conqueror** only, and I do not accept being back in return for giving up my ideas of Jihad’ ” (Jehl, 2001).

“The London-based al-Majallah magazine. . . . [quoted al-Zawahiri] as saying: ‘It will be a long [war]. **We will exact a high toll on the Americans** and suicide attacks will be one of our effective methods’ ” (“Bin Laden’s no. 2,” 2001).

“Al-Zawahiri [fraudulently] collected thousands of dollars from donors who were told the money was intended to help Afghan refugees” (Gibson, MacLeod, & Radwan, 2001).

Interpersonal conduct. The core diagnostic feature of the interpersonal conduct of Ambitious individuals is their *assertiveness*; they stand their ground and are tough, competitive, **persuasive**, hardnosed, and **shrewd**. More exaggerated variants of the Ambitious pattern are *entitled*; they lack genuine empathy and expect favors without assuming reciprocal responsibilities. The most extreme variants of this pattern are *exploitative*; they **shamelessly take others for granted and manipulate and use them to indulge their desires**, enhance themselves, or advance their personal agenda, yet contributing little or nothing in return. Ironically, the sheer audacity of all variants of this pattern, rather than being clearly seen for what it is—impertinence, impudence, or sheer gall—often **conveys confidence and authority** and elicits admiration and obedience from others. Indeed, these personalities are skilled at sizing up those around them and conditioning those so disposed to adulate, glorify, and serve them. (Adapted from Millon, 1996, pp. 405–406; Millon & Everly, 1985, pp. 32, 39)

“ ‘Ayman [al-Zawahiri] is for bin Laden like the brain to the body,’ says Montasser al-Zayat, a lawyer in Cairo who has represented many Islamic militants and who was jailed with al-Zawahiri in the early 1980s. ‘When Osama went to Afghanistan, he was just a young man supporting the Afghans. He did not have a political outlook. Ayman controlled Osama completely. He **convinced** him of the principles of jihad’ ” (Gibson et al., 2001).

“Experts in Cairo describe Dr. Zawahiri as having delivered to the [al-Qaida] organization . . . a **shrewd** intelligence and years of expertise” (Jehl, 2001).

“Bin Laden had the dollars; al-Zawahiri had the dream” (Gibson et al., 2001).

Continued on next page

Continued from previous page

“He [al-Zawahiri] **convinced** bin Laden of the need for armed action to establish Islamic states in other Muslim countries. One associate told Al Sharq al Awsat, the influential Saudi-owned newspaper in London, that Zawahiri gained **great influence** over bin Laden” (Miller, 2001).

“ ‘Ayman is much more **politically skilled** than bin Laden,’ argues Mary Anne Weaver, author of *A Portrait of Egypt: A Journey Through the World of Militant Islam* [italics added]. ‘He’s better educated. He has a larger worldview. . . . He was much more political than religious’ ” (Gibson et al., 2001).

“In 1991, he made at least one fund-raising trip to California. Using a **false identity** as Dr. Abdel Muez, Zawahiri visited three mosques, [fraudulently] claiming to be raising money for Afghan widows, orphans and other refugees” (Miller, 2001).

“Al-Zawahiri’s own forte then [1979] was **organization**, not ideology” (Gibson et al., 2001).

“Egyptians who know him [al-Zawahiri] describe him as a **smart but cautious** man with an extraordinary dedication to extremist causes” (Jehl, 2001).

“Zawahiri is a **brilliant and forceful intellect**, the man who provides much of the ideological and strategic grounding to bin Laden’s war against the West, according to friends, family and terrorism experts” (Miller, 2001).

“Several [defendants in the 1999 Egyptian terror trial] said Dr. Zawahiri was their **leader**, arranging for forged passports to ease their travels between Yemen, Afghanistan and Sudan” (Sachs & Kifner, 2001).

Cognitive style. The core diagnostic feature of the cognitive style of Ambitious individuals is their *imaginativeness*; they are **inventive, innovative, and resourceful**, and ardently believe in their own efficacy. More exaggerated variants of the Ambitious pattern are cognitively *expansive*; they display **extraordinary confidence in their own ideas and potential for success** and redeem themselves by taking liberty with facts or distorting the truth. The most extreme variants of this pattern are cognitively *unconstrained*; they are preoccupied with **self-glorifying fantasies** of accomplishment or fame, are little constrained by objective reality or cautionary feedback, and deprecate competitors or detractors in their quest for glory. All variants of this pattern to some degree harbor fantasies of success or rationalize their failures; thus, they tend to **exaggerate** their achievements, transform failures into successes, construct lengthy and intricate justifications that inflate their self-worth, and quickly deprecate those who refuse to bend to or enhance their admirable sense of self. (Adapted from Millon, 1996, p. 406; Millon & Everly, 1985, pp. 32, 39)

“According to Arab analysts, al-Zawahiri was **instrumental in forging the coalition** of al-Jihad . . . , Bin Laden’s forces, two Pakistani groups and another from Bangladesh in February 1998 with the purpose of waging war on the USA” (Blanche, 2001; also Foden, 2001).

“By the early 1990s Zawahiri was hard at work to **expand the resources and scope** of the Egyptian Islamic Jihad” (Miller, 2001).

“. . . in Afghanistan and Pakistan, working under primitive conditions (his uncle said Zawahiri had to use honey to sterilize wounds)” (Miller, 2001).

“Ayman al-Zawahiri has **never been one to think small**” (Gibson et al., 2001).

“Asked in 1993 when he might return to Egypt, Dr. Zawahiri told the London-based newspaper Al Hayat, ‘**I will be back as a conqueror** only, and I do not accept being back in return for giving up my ideas of Jihad’ ” (Jehl, 2001).

Mood/temperament. The core diagnostic feature of the characteristic mood and temperament of Ambitious individuals is their social *poise*; they are **self-composed, serene**, and optimistic, and are typically imperturbable, unruffled, and cool and levelheaded under pressure. More exaggerated variants of the Ambitious pattern are *insouciant*; they manifest a general air of nonchalance, imperturbability, or feigned tranquility. They characteristically appear coolly unimpressible or buoyantly optimistic, except when their narcissistic confidence is shaken, at which time either rage, shame, or emptiness is briefly displayed. The most extreme variants of this pattern are *exuberant*; they experience a pervasive sense of emotional well-being in their everyday life—a buoyancy of spirit and an optimism of outlook—except when their sense of superiority is punctured. When emotionally deflated, their air of nonchalance and imperturbability quickly turns to edgy irritability and annoyance. Under more trying circumstances, sham serenity may turn to feelings of emptiness and humiliation, sometimes with vacillating episodes of rage, shame, and dejection. All variants of this pattern to some degree convey a self-satisfied smugness, yet are easily **angered** when criticized, obstructed, or crossed. (Adapted from Millon, 1996, p. 408; Millon & Everly, 1985, pp. 32, 39)

“Relatives remember him as being. . . **composed**” (Gibson et al., 2001).

“**Placid** looking” (Gibson et al., 2001).

“After the [1998 embassy] bombings [in east Africa], the U.S. struck back with cruise missiles. Zawahiri was **undaunted**. Speaking by satellite phone, he told a [Los Angeles] Times reporter that further attacks lay in the future” (Miller, 2001).

“[On trial for his alleged role in the assassination of Anwar Sadat,] Zawahiri appeared with other conspirators **angrily denouncing** the government” (Miller, 2001).

Self-image. The core diagnostic feature of the self-perception of Ambitious individuals is their *certitude*; they have **strong self-efficacy beliefs** and considerable courage of conviction. More exaggerated variants of the Ambitious pattern have an *admirable* sense of self; they view themselves as **extraordinarily meritorious** and esteemed by others, and have a high degree of self-worth, though others may see them as egotistic, inconsiderate, cocksure, and **arrogant**. The most extreme variants of this pattern have a *superior* sense of self. They view themselves as having **unique and special qualities**, deserving of great admiration and entitled to unusual rights and privileges. Accordingly, they often act in a **pompous** or grandiose manner, often in the absence of commensurate achievements. In high-level leadership positions, some of these individuals may exhibit a **messianic** self-perception; those failing to pay proper respect or bend to their will typically are treated with contempt and scorn. (Adapted from Millon, 1996, p. 406)

“Dr. Zawahiri writes with swagger about his **certainty** that the ‘Islamic nation’ will triumph” (MacFarquhar, 2001).

“Bin Laden had the dollars; al-Zawahiri had **the dream**” (Gibson et al., 2001).

“The physician turned terrorist seems **determined to leave his testament and inspirational manual** [*Knights Under the Banner of the Prophet*]. . . to future generations” (Gibson et al., 2001).

“[Zawahiri, in his autobiography, *Knights Under the Banner of the Prophet*:] ‘This book is a warning for the evil powers targeting our nation that your defeat draws nearer daily and we are taking step after step to retaliate against you and that **your fight with the nation is doomed to defeat** and all you efforts will come to nothing but merely postpone the **inevitable victory** of our nation’ ” (MacFarquhar, 2001).

“The London-based al-Majallah magazine. . . [quoted al-Zawahiri] as saying: ‘It will be a long [war]. **We will exact a high toll on the Americans** and suicide attacks will be one of our effective methods’ ” (“Bin Laden’s no. 2,” 2001).

“Whether it was al-Zawahiri who influenced Bin Laden in February 1998 when the Islamic alliance was formed in Afghanistan, or the other way round, is a matter of conjecture. But from their union grew an **apocalyptic vision** that in many ways resonates more with al-Zawahiri’s modus vivendi than Bin Laden’s” (Blanche, 2001).

“Asked in 1993 when he might return to Egypt, Dr. Zawahiri told the London-based newspaper Al Hayat, ‘**I will be back as a conqueror** only, and I do not accept being back in return for giving up my ideas of Jihad’ ” (Jehl, 2001).

Regulatory mechanisms. The core diagnostic features of the unconscious regulatory (i.e., ego-defense) mechanisms of Ambitious individuals are *rationalization* and *fantasy*; when their admirable self-image is challenged or their confidence shaken, they maintain equilibrium with facile self-deceptions, devising plausible reasons to justify their self-centered and socially

inconsiderate behaviors. They rationalize their difficulties, offering alibis to put themselves in a positive light despite evident shortcomings and failures. When rationalization fails, they turn to fantasy to assuage their feelings of dejection, shame, or emptiness, redeem themselves, and reassert their pride and status. (Adapted from Millon, 1996, p. 407)

Object representations. The core diagnostic feature of the internalized object representations of Ambitious individuals is their *contrived* nature; internalized representations constructed from past experiences, which serve as inner templates for evaluating new experiences, are of illusory and changing memories. Consequently, problematic experiences are refashioned to appear consonant with their high sense of self-worth, and unacceptable impulses and deprecatory evaluations are transmuted into more admirable images and percepts. (Adapted from Millon, 1996, pp. 406–407)

Morphologic organization. The core diagnostic feature of the morphological organization of Ambitious individuals is its *spuriousness*; the interior design of the personality system, so to speak, is essentially counterfeit, or bogus. Owing to the misleading nature of their early experiences—characterized by the ease with which good things came to them—these individuals may lack the inner skills necessary for regulating their impulses, channeling their needs, and resolving conflicts. Accordingly, commonplace demands may be viewed as annoying incursions and routine responsibilities as pedestrian or demeaning. Excuses and justifications are easily mustered and serve to perpetuate selfish behaviors and exploitative, duplicitous social conduct. (Adapted from Millon, 1996, pp. 407–408)

Summary and Formulation: The Abrasive Negativist

With his primary contentious, oppositional, negativistic (Scale 5B) and dominant, controlling, sadistic (Scale 1A) mixed pattern, Ayman al-Zawahiri matches the personality composite that Millon has termed the *abrasive negativist* (Millon, 1996, p. 556; Millon & Davis, 2000, p. 476) or *abrasive psychopath* (Millon & Davis, 1998, pp. 167–168). For these personalities, minor frictions easily exacerbate into major confrontations and power struggles. They are quick to spot inconsistencies in others' actions or ethical standards and adept at constructing arguments that amplify observed contradictions. They characteristically take the moral high ground, dogmatically and contemptuously expose their antagonists' perceived hypocrisy, and contemptuously, derisively, and scornfully turn on those who cross their path (Millon & Davis, 2000, p. 476). According to Millon and Davis (2000),

Abrasive negativists . . . [are] caught in . . . [a] conflict between their own agenda and a loyalty to others . . . [and are] overtly and intentionally contentious and quarrelsome. . . . Such individuals, in fact, feel so torn by conflict that every request or expectation feels like a major burden, an opportunity to incur contempt. Past experience has shown them that even their most conscientious performances are likely to be evaluated with disappointment and derision. . . .

The abrasive negativist fears that loyalty and the tender emotions are only a sad illusion created to conceal the perverse cruelty of human nature. Many were subjected as children to “damned if you do and damned if you don’t” situations by their attachment figures. As such, minor frictions tend to exacerbate into major confrontations and power struggles. Some take special joy in spotting inconsistencies in the behaviors or ethical standards of anyone who would require something from them. They construct arguments that amplify observed contradictions, and shove these squarely in the face of their “antagonists,” just for the sadistic pleasure of undermining their self-confidence and watching them squirm.

Aware of the sadistic power of the superego, many take the moral high ground and dogmatically insist that others are either hypocritical or mentally defective. When pressed, even such indirect oppositionality may give way to contemptuous faultfinding and outright insults. During such periods, anyone who crosses their path may become an object of scorn and derision. Abrasive negativists represent a blend of the negativistic and sadistic personalities. (p. 476)

Leadership and Policy Implications

There may be some utility in coordinating the present findings with alternative models of political personality and complementary theories of political leadership. Dean Keith Simonton (1988), for example, has proposed five empirically derived presidential styles (charismatic, interpersonal, deliberative, neurotic, and creative). Given the fidelity with which they mirror the currently popular five-factor model, whose correlates with Millon's personality patterns have been empirically established (Millon, 1994, p. 82), Simonton's stylistic dimensions may have considerable heuristic value for establishing links between personality and political leadership. Similarly, Lloyd Etheredge (1978) and Margaret Hermann (1987) have developed personality-based models of foreign policy leadership orientation that can be employed rationally and intuitively to enhance and complement the predictive utility of Millon's model with respect to leadership performance in the arena of international affairs. Admittedly, the link between conventional international relations and international terrorism may be somewhat tenuous.

From Simonton's perspective, al-Zawahiri's elevated scores on the MIDC Contentious and Dominant scales suggest a *deliberative* leadership style, which conceptually corresponds to the "Big Five" Conscientiousness factor. It should be noted, however, that al-Zawahiri is an imperfect match for this leadership style, given his rather weak loading on the MIDC Conscientious scale (Scale 6). According to Simonton (1988), the deliberative leader

commonly "understands implications of his decisions; exhibits depth of comprehension" . . . , is "able to visualize alternatives and weigh long term consequences" . . . , "keeps himself thoroughly informed; reads briefings, background reports" . . . , is "cautious, conservative in action" . . . , and only infrequently "indulges in emotional outbursts." (p. 931)

Classifying al-Zawahiri in terms of Etheredge's (1978) fourfold typology of personality-based foreign policy role orientations, which locates policymakers on the dimensions of dominance–submission and introversion–extraversion, also poses a challenge. Al-Zawahiri's elevated scores on the MIDC Dominant and Contentious scales clearly categorize him as a high-dominance leader. His location on the introversion–extraversion dimension is harder to gauge; on balance, al-Zawahiri's modest loading on the Retiring scale (Scale 8) suggests that he leans more toward introversion.⁶ That being the case, al-Zawahiri is best classified as a *high-dominance introvert* in Etheredge's (1978) typology of personality-based foreign policy role orientations. According to Etheredge, high-dominance introverts (in American politics, presidents such as Woodrow Wilson and Herbert Hoover) are quite willing to use military force, tending

to divide the world, in their thought, between the moral values they think it ought to exhibit and the forces opposed to this vision. They tend to have a strong, almost Manichean, moral component to

⁶ Samir Raafat (2001) describes al-Zawahiri as "the introvert offspring of a severely traditional family" and "the quiet, axiomatic introvert retreating into religion."

their views. They tend to be described as stubborn and tenacious. They seek to reshape the world in accordance with their personal vision, and their foreign policies are often characterized by the tenaciousness with which they advance one central idea. . . . [These leaders] seem relatively preoccupied with themes of *exclusion*, the establishment of institutions or principles to keep potentially disruptive forces in check. (p. 449; italics in original)

Etheredge's high-dominance introvert appears to be most similar in character to Hermann's (1987) *expansionist* orientation to foreign affairs. These leaders have a view of the world as being "divided into 'us' and 'them,' " based on a belief system in which conflict is viewed as inherent in the international system. This world view prompts a personal political style characterized by a "wariness of others' motives" and a directive, controlling interpersonal orientation, resulting in a foreign policy "focused on issues of security and status," favoring "low-commitment actions" and espousing "short-term, immediate change in the international arena." Expansionist leaders "are not averse to using the 'enemy' as a scapegoat" and their rhetoric often may be "hostile in tone" (pp. 168–169).

This perspective seems consistent with the worldview of al-Zawahiri, as described by Azzam Tamimi, director of the Institute of Islamic Political Thought in London:

Al-Zawahiri is now the chief ideologue of Takfir wal Hijra (Anathema and Exile), the very bleakest offshoot of Islamic extremism, which freely targets as infidels not only Westerners but also other Muslims. . . . "According to him the majority of Muslims around the world are not Muslim," says Tamimi. "His ideas negate the existence of common ground with others, irrespective of their religion. Life for him is a continuous conflict with 'the Other.' " (Gibson et al., 2001)

Conclusion

The major implication of the study is that it offers an empirically based personological framework for conceptualizing Ayman al-Zawahiri's dichotomous thinking, antagonistic negativism, single-minded commitment to a cause, inflammatory rhetoric, and forceful persuasiveness, instrumental in Osama bin Laden's insidious campaign to propagate diabolical enemy images of the West as a catalyst for incubating a political culture contrived to inculcate religious extremism in the Islamic world, ultimately in service of his personal dreams of glory.

As a leader of the Egyptian Islamic Jihad, al-Zawahiri demonstrated his ability to motivate others to carry out unfathomable acts of violence. As Osama bin Laden's right-hand man—with the assets, resources, and global reach of the al-Qaida terror network—al-Zawahiri in the end acquired the capacity to vent his blood-dimmed tide of vengeance upon the modern world.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Bin Laden's no. 2 still alive & plotting [Electronic version]. (2001, December 13). *The New York Post*, p. 3. Retrieved January 28, 2002, from Lexis-Nexis.
- Blanche, E. (2001, October 3). Ayman al-Zawahiri: Attention turns to the other prime suspect [Electronic version]. *Jane's Intelligence Review*. Retrieved January 21, 2002, from http://www.janes.com/security/international_security/news/jir/jir011003_1_n.shtml
- Costa, P. T., Jr., & McCrae, R. R. (Eds.). (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Etheredge, L. S. (1978). Personality effects on American foreign policy, 1898–1968: A test of interpersonal generalization theory. *American Political Science Review*, 72, 434–451.
- Foden, G. (2001, September 24). The hunt for “Public Enemy No 2” [Electronic version]. *The Guardian*. Retrieved January 21, 2002, from Guardian Unlimited at <http://www.guardian.co.uk/Archive/Article/0%2C4273%2C4263002%2C00.html>
- Gibson, H., MacLeod, S., & Radwan, A. (2001, November 12). Public Enemy No. 2: Meet the Egyptian doctor who helps call the shots [Electronic version]. *Time*, 158(21), 77ff. Retrieved January 28, 2002, from InfoTrac's Expanded Academic ASAP (Article A79782229).
- Hermann, M. G. (1987). Assessing the foreign policy role orientations of sub-Saharan African leaders. In S. G. Walker (Ed.), *Role theory and foreign policy analysis* (pp. 161–198). Durham, NC: Duke University Press.
- Immelman, A. (1993). The assessment of political personality: A psychodiagnostically relevant conceptualization and methodology. *Political Psychology*, 14, 725–741.
- Immelman, A. (1998). The political personalities of 1996 U.S. presidential candidates Bill Clinton and Bob Dole. *Leadership Quarterly*, 9, 335–366.
- Immelman, A. (1999). *Millon inventory of diagnostic criteria manual* (2nd ed.). Unpublished manuscript, St. John's University, Collegeville, MN.
- Immelman, A. (2002a, July). *The personality profile of al-Qaida leader Osama bin Laden*. Paper presented at the Twenty-Fifth Annual Scientific Meeting of the International Society of Political Psychology, Berlin, Germany.
- Immelman, A. (2002b, July). *The personality profile of September 11 hijack ringleader Mohamed Atta*. Paper presented at the Twenty-Fifth Annual Scientific Meeting of the International Society of Political Psychology, Berlin, Germany.
- Immelman, A. (2002c). The political personality of U.S. president George W. Bush. In L. O. Valenty & O. Feldman (Eds.), *Political leadership for the new century: Personality and behavior among American leaders* (pp. 81–103). Westport, CT: Praeger.

- Immelman, A. (2003). Personality in political psychology. In I. B. Weiner (Series Ed.), T. Millon & M. J. Lerner (Vol. Eds.), *Handbook of psychology: Vol. 5. Personality and social psychology* (pp. 599–625). Hoboken, NJ: Wiley.
- Immelman, A., & Beatty, A. (2003, July). *The personality profile of Zimbabwean president Robert Mugabe*. Paper presented at the Twenty-Sixth Annual Scientific Meeting of the International Society of Political Psychology, Boston, MA.
- Immelman, A., & Steinberg, B. S. (Compilers) (1999). *Millon inventory of diagnostic criteria* (2nd ed.). Unpublished research scale, St. John's University, Collegeville, MN.
- Jehl, D. (2001, September 24). Heir Apparent: Egyptian seen as top aide and successor to bin Laden [Electronic version]. *The New York Times*, p. B1. Retrieved January 28, 2002, from Lexis-Nexis.
- MacFarquhar, N. (2001, December 9). Word for word/Jihad lit: Beware of hidden enemies and their wolves and foxes [Electronic version]. *The New York Times*, section 4, p. 7. Retrieved January 28, 2002, from Lexis-Nexis.
- MacLeod, S. (with Radwan, A). (2002, February 4). Insider information: A former friend and lawyer of Ayman al-Zawahiri takes the terrorist leader on in a startling new book [Electronic version]. *Time International*, 159(4), 77. Retrieved March 7, 2002, from InfoTrac's Expanded Academic ASAP (Article A82827961)
- Miller, T. C. (2001, October 2). Zawahiri: The alleged brains behind bin Laden [Electronic version]. *Los Angeles Times*, p. A1. Retrieved February 3, 2002, from <http://www.latimes.com/news/nationworld/wire/sns-worldtrade-zawahira-lat.story>
- Millon, T. (1969). *Modern psychopathology: A biosocial approach to maladaptive learning and functioning*. Philadelphia: W. B. Saunders. (Reprinted 1985 by Waveland Press, Prospect Heights, IL)
- Millon, T. (1986a). A theoretical derivation of pathological personalities. In T. Millon & G. L. Klerman (Eds.), *Contemporary directions in psychopathology: Toward the DSM-IV* (pp. 639–669). New York: Guilford.
- Millon, T. (1986b). Personality prototypes and their diagnostic criteria. In T. Millon & G. L. Klerman (Eds.), *Contemporary directions in psychopathology: Toward the DSM-IV* (pp. 671–712). New York: Guilford.
- Millon, T. (1990). *Toward a new personology: An evolutionary model*. New York: Wiley.
- Millon, T. (1991). Normality: What may we learn from evolutionary theory? In D. Offer & M. Sabshin (Eds.), *The diversity of normal behavior: Further contributions to normatology* (pp. 356–404). New York: Basic Books.
- Millon, T. (with Weiss, L. G., Millon, C. M., & Davis, R. D.). (1994). *Millon Index of Personality Styles manual*. San Antonio, TX: Psychological Corporation.
- Millon, T. (with Davis, R. D.). (1996). *Disorders of personality: DSM-IV and beyond* (2nd ed.). New York: Wiley.

- Millon, T. (2003). Evolution: A generative source for conceptualizing the attributes of personality. In I. B. Weiner (Series Ed.), T. Millon & M. J. Lerner (Vol. Eds.), *Handbook of psychology: Vol. 5. Personality and social psychology* (pp. 3–30). Hoboken, NJ: Wiley.
- Millon, T., & Davis, R. D. (1998). Ten subtypes of psychopathy. In T. Millon, E. Simonsen, M. Birket-Smith, & R. D. Davis (Eds.), *Psychopathy: Antisocial, criminal, and violent behavior* (pp. 161–170). New York: Guilford.
- Millon, T., & Davis, R. D. (2000). *Personality disorders in modern life*. New York: Wiley.
- Millon, T., & Everly, G. S., Jr. (1985). *Personality and its disorders: A biosocial learning approach*. New York: Wiley.
- Oldham, J. M., & Morris, L. B. (1995). *The new personality self-portrait* (Rev. ed.). New York: Bantam Books.
- Raafat, S. (2001, November 1). Ayman al-Zawahiri [sic]: The world's second most wanted man. Egy.com. Retrieved March 7, 2002, from <http://www.egy.com/people/01-11-01.shtml>
- Sachs, S., & Kifner, J. (2001, October 23). Bin Laden's lieutenant: Egyptian raised terror funds in U.S. in 1990's [Electronic version]. *The New York Times*, p. B4. Retrieved January 28, 2002, from Lexis-Nexis.
- Simonton, D. K. (1988). Presidential style: Personality, biography, and performance. *Journal of Personality and Social Psychology*, 55, 928–936.
- Strack, S. (1991). *Personality Adjective Check List manual* (rev.). South Pasadena, CA: 21st Century Assessment.
- Strack, S. (1997). The PACL: Gauging normal personality styles. In T. Millon (Ed.), *The Millon inventories: Clinical and personality assessment* (pp. 477–497). New York: Guilford.
- Wooten, J. (2001, October 2). Beyond bin Laden. From surgeon to terrorist: The second most wanted man in the world. ABCnews.com. Retrieved October 31, 2001, from http://abcnews.go.com/sections/wnt/WorldNewsTonight/WTC_zawahiri0101002.html