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The MCMI–III: Present and Future Directions

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Both the original Millon Clinical Multiaxial Inventory (MCMI–I; Millon, 1977) and the Millon Clinical Multiaxial Inventory–II (MCMI–II; Millon, 1987) were refined and strengthened on a regular basis by both theoretic logic and research data. This aspiration has continued. The new Millon Clinical Multiaxial Inventory–III (MCMI–III; Millon, 1994) has been further coordinated with the most recent official diagnostic schema, the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., [*DSM–IV*]; American Psychiatric Association [APA], 1994) in an even more explicit way than before. Although the publication of the first version of the MCMI preceded the publication of the *DSM–IV*, its author played a major role in formulating the official manual's personality disorders, contributing thereby to their conceptual correspondence. The *DSM–III–R* (APA, 1987) was subsequently published in the same year as the MCMI–II; the inventory was modified in its final stages to make it as consonant as possible with the conceptual changes introduced in the then forthcoming official classification. The present version of the MCMI, the MCMI–III, strengthens these correspondences further by drawing on many of the diagnostic criteria of the *DSM–IV* to serve as the basis for drafting the inventory's items. This article reports on a select set of theoretical and empirical developments that are being carefully weighed for possible inclusion in future MCMIs, or as a guide in the refinement process of future MCMIs.

A brief historical review may be in order. Like the MCMI–I and MCMI–II, the MCMI–III is not cast in stone, but instead remains an evolving assessment instrument, one that will be significantly upgraded and refined to reflect substantive

advances in knowledge, be it from theory, research, or clinical experience. What prompted the introduction of MCMI–III changes? First, the taxonomic theory of which the first two MCMI versions were deductive and operational measures, had undergone further developments (Millon, 1986a, 1986b, 1990). Consequently, two new MCMI personality disorder scales were introduced in the second version, and an additional personality scale was added in this most recent, or third version. Similarly, owing to its increasing importance in diagnostic work, a new clinical syndrome scale (posttraumatic stress disorder) was added to the MCMI–III. Second, there has been a continuous growth of interest in personality and its disorders. The *Journal of Personality Disorders* and the recently established *International Society for the Study of Personality Disorders* illustrate the emergence of these syndromes as a major focus for mental disorders. This surge of clinical, theoretical, and research literature reflect on the late 70s, 80s, and 90s as a time of Renaissance in personality theory and assessment (Millon, 1984, 1990). Enriched by this knowledge, much of which has been incorporated into the DSM, an increasingly solid base for making refined diagnostic decisions has been found, well beyond the literature of the late 70s and early 80s. In addition, Millon's work has led him to articulate an expanding base of diagnostic criteria and personality concepts (e.g., Millon, 1986a, 1990), much more extensive than those of earlier *DSM*s. This growing body of clinical literature provides much of the knowledge base for the MCMI–III. To the extent that *DSM–IV* also reflects these advances, its correspondence to MCMI–III has been further strengthened. Third, numerous cross-validation and cross-generalization studies have been and continue to be executed with the goal of evaluating and improving each of the several elements that embody both MCMI instruments—their items, scales, scoring procedures, algorithms, and interpretive text (see Choca, Shanley, & Van Denburg, 1992; Craig, 1993; Hsu & Maruish, 1992; Maruish, 1994). These ongoing investigations will continue to provide an empirical grounding for further upgrading of each of these components.

With the preceding information as a base, a number of changes were introduced to create the MCMI–III:

1. One additional personality disorder scale—the Depressive Personality—has been added to the 13 that constituted the personality segment of MCMI–II. Also, a Posttraumatic Stress Disorder scale was added to the clinical syndromes group, as well as a small set of items to strengthen the utility of the Noteworthy Responses section in the areas of Child Abuse, Anorexia, and Bulimia. Modifications have been made also in procedures for correcting distortion effects (e.g., random responding, faking, denial, complaining) that simplify the scoring procedures developed in the MCMI–II.
2. To provide for additional scales and to optimize MCMI item to *DSM–IV* criteria correspondence, as well to reflect generalization studies, 95 new MCMI–III items were introduced to replace 95 extant MCMI–II items.

3. An item weighting system ranging from 1 to 3 points was introduced in MCMI–II scoring to reflect item differences in the variety and strength of their supporting validation data. In the MCMI–III, prototypal items are given a weight of 2 points; all others receive 1 point in the scoring system. Because the prototypal items demonstrate substantive, structural, and external validation on their "home" scale (Loevinger, 1957), they are given a higher weight than subsidiary items selected on the basis of external validation alone.

4. Interpretive texts were expanded and refined to reflect general advances in knowledge, changes introduced in the MCMI–III's underlying theory and the *DSM–IV*, as well as progress in treatment planning utilizing short-term and circumscribed methods.

A principal goal in constructing the MCMI was to keep the total number of items small enough to encourage use in diverse diagnostic and treatment settings, yet large enough to permit the assessment of a wide range of clinically relevant behaviors. At 175 items, the final form is much shorter than comparable instruments, with terminology geared to an eighth-grade reading level. The majority of clients can complete the MCMI in 20 to 30 min, facilitating relatively simple and rapid administration, and minimizing client resistance and fatigue. This article reports on some of the theoretical and empirical developments that are in the pipeline for future MCMIs.

The MCMI–III consists of 24 clinical scales, as well as three "modifier" scales, Disclosure, Desirability, and Debasement, the purpose of which is to identify distorting tendencies that characterize clients and their responses. The next two sections constitute the basic personality disorder scales, essentially reflecting Axis II of the *DSM*. The first section (1 to 8B) appraises what are to be viewed as moderately severe personality pathologies, ranging from the Schizoid to the Self-Defeating (Masochistic) scales; the second section (scales S, C, and P) represents more severe personality pathologies, encompassing Schizotypal, Borderline, and Paranoid disorders. The following two sections cover several of the more prevalent Axis I disorders, ranging from the more moderate clinical syndromes (scales A to T) to those of greater severity (scales SS, CC, and PP). The division between personality and clinical disorders scales parallels the multiaxial model, with its important interpretive implications. The MCMI–III scales are presented in Table 1.

THEORETICAL DEVELOPMENTS: ASSESSMENT OF PERSONALITY SUBTYPES

Personality disorders are best thought of as prototypes. Within each prototype, however, lie numerous variations. There is no one single schizoid or avoidant or depressive or histrionic type, but instead, several variations, different forms in which the core or prototypal personality expresses itself. With the publication of *Disorders of Person-*

TABLE 1
Structure of the Millon Clinical Multiaxial Inventory

Clinical personality patterns	
1	Schizoid
2A	Avoidant
2B	Depressive
3	Dependent
4	Histrionic
5	Narcissistic
6A	Antisocial
6B	Aggressive (Sadistic)
7	Compulsive
8A	Passive-aggressive (Negativistic)
8B	Self-defeating (Masochistic)
Severe personality pathology	
S	Schizotypal
C	Borderline
P	Paranoid
Clinical syndromes	
A	Anxiety
H	Somatoform
N	Bipolar: Manic
D	Dysthymia
B	Alcohol dependence
T	Drug dependence
R	Posttraumatic stress disorder
Severe syndromes	
SS	Thought disorder
CC	Major depression
PP	Delusional disorder
Modifying indices	
X	Disclosure
Y	Desirability
Z	Debasement
V	Validity

ality: DSM–IV and Beyond, Millon and Davis (1995) elaborated a series of personality subtypes for each of the major prototypes deduced from Millon's evolutionary theory (1990). These subtypes essentially represent a reading of the modern and historical literature in convergence with clinical wisdom, cultural myth, and empirical fact. Often, they are simply mixtures of major types. The deficient conscience, fraudulent dealings, and arrogant attitude of the "Unprincipled" Narcissist, for example, is reminiscent of the con-man or charlatan, a cultural stereotype incarnated as a kind of antisocial narcissist. Likewise, the "Nomadic" Antisocial, represented as a gypsy-like roamer, vagrant, or itinerant railroad bum, existing as a scavenger at the margins of society, essentially reflects a mixture of the Schizoid and Antisocial.

In other cases, the subtypes exist at the confluence of Millon's evolutionary theory and other organizing principles. Psychodynamic thinkers, for example, have described the "Compensating" Narcissist as an individual who counteracts deep feelings of inferiority and lack of self-esteem by creating for oneself the illusion of being superior and exceptional. Similarly, the "Hypersensitive" Avoidant represents a more manifestly cognitive variant of a major type, being intensely wary and suspicious, alternately panicky, terrified, edgy and timorous, then thin-skinned, high-strung, petulant, and prickly. Table 2 lists the subtypes described by Millon and Davis (1995) for the Narcissistic Personality, along with their hypothesized MCMI–III profiles. Descriptions for the 14 personality disorders of *DSM–IV* and *DSM–III–R* are available in Millon and Davis (1995).

Besides the obvious relationship of each subtype to its cousins, all the subtypes share an important feature: Each is a statement of particular truth about the nature of the personologic landscape, a claim that the world contains such-and-such personalities in it, more by historical accident than ontological necessity. Each is a specific manifestation of a major type in the context of our particular times and culture, and if history or culture were different, then the subtypes would likely be different, also. The major prototypes, on the other hand, are, in a sense, required by the theory, just as Existence, Adaptation, and Replication are required by the laws of evolution. Although the subtypes lack the deductive inevitability of major prototypes, they nevertheless bring the major types down to a level of unparalleled descriptive specificity, and, it is hoped, proportionately increased clinical utility.

However, it is precisely because the subtypes are not inevitable products of the evolutionary theory that they not only bear a greater burden of validational evidence

TABLE 2
Narcissistic Subtypes and Their Millon Clinical Multiaxial Inventory (MCMI) Profiles

Elitist	Feels privileged and empowered by virtue of special childhood status and pseudo-achievements; entitled facade bears little relation to reality; seeks favored and good-life; is upwardly mobile; cultivates special status and advantages by association. MCMI: 5
Amorous	Sexually seductive, enticing, beguiling, tantalizing; glib and clever; disinclines real intimacy; indulges hedonistic desires; bewitches and inveigles the needy and naive; pathological lying and swindling. MCMI: 5–4
Unprincipled	Deficient conscience; unscrupulous, amoral, disloyal, fraudulent, deceptive, arrogant, exploitive, a con-man and charlatan, dominating, contemptuous vindictive. MCMI: 5–6A
Compensatory	Seeks to counteract or cancel out deep feelings of inferiority and lack of self-esteem; offsets deficits by creating illusions of being superior, exceptional, admirable, noteworthy; self-worth results from self-enhancement. MCMI: 5–8A/2A

than do the major types, but also present a greater challenge for reliable and valid assessment. In particular, the issue of base rates, the prevalence of the various subtypes, is of particular importance. Because the base rates for some of the major types are quite low, the Schizoid and the Sadistic, for example, many of the subtypes are likely to be quite rare. A particular clinician, in fact, might go years between seeing a particular subtype, making such validational research almost impossible in any one clinical setting. Moreover, some subtypes may be seen quite frequently, whereas others will hardly ever be observed. All of the problems associated the prediction of low base rate phenomena, like the prediction of suicide or murder, are also problems here.

Nevertheless, several directions could be pursued in order to advance the assessment utility of the MCMI in relation to the subtypes. Millon (1995), for example, presented MCMI–III codetypes for each personality disorder subtype. Thus, on theoretical grounds, it is expected that the Unprincipled Narcissist will appear as a 5 – 6A, whereas the "Compensating" Narcissist is more likely to appear is a 5 – 8A or 5 – 2A. Such a codetype approach would seem to be the most straightforward, especially where these subtypes exist predominately as a mixture of two or more major types. In the coming years, as clinicians already skilled in Millon's theory become well enough acquainted with these subtypes to provide useful external validity ratings, studies that examine the diagnostic efficiency of these MCMI profile patterns will become possible. Not all 5 – 8A codetypes, for example, are likely to be classified as "Compensating" Narcissists. Conversely, some "Compensating" Narcissists may produce profiles other than the 5 – 8A. Eventually, the MCMI–III items most directly responsible for each subtype profile will be identified and examined against the content of the subtypes, and a feedback process will begin through which the item content of the MCMI and the content of the subtypes themselves are mutually refined. Items for future MCMI's will definitely be written with accurate classification of these subtypes in mind.

How an emphasis on personality subtypes will affect the length of the MCMI and its exact item composition, are, of course, open questions at the current time. The answers in part are dependent on the nature of the empirical problems encountered. Certainly, it would seem difficult to provide an accurate assessment of over 60 subtypes with an MCMI of only 175 items. Even if all of the MCMI items were oriented toward Axis II, that would still leave less than 3 unique items per subtype, far too few to protect discriminant validity. Fortunately, the base rates of some the major personalities, namely the Antisocial and Borderline, makes their subtypes more important than those of the Schizoid, for example. Where compromises in inventory length must be made then, they will favor the assessment of those subtypes that are most clinically relevant, at least for pencil-and-paper forms. Future computer-administered versions of the MCMI, programmed to optimize the selection of items based on the client's pattern of prior responses, need not administer an entire item bank, and are much more likely to yield highly specific, subtype-relevant information.

EMPIRICAL DEVELOPMENTS: TRAIT SUBSCALES FOR SOME FUTURE MCMI AXIS II SCALES

Psychological instruments may be interpreted at several levels. At the lowest level lie individual test items. Because any single item is too unreliable and narrow as a predictor of broader individual differences, many items are usually aggregated together to form scales. Each scale, in turn, represents only a single dimension of the total personality, and consequently, are usually examined conjointly as set, or profile configuration. Assuming test validity, and assuming that the inventory has some claim, either deductive-theoretical or inductive-statistical, as a representation of all of personality, the profile configuration essentially becomes an intervening variable for individuality.

A level of interpretation that is becoming more important in modern inventories is the personality trait. Traits are assessed at a level between what are variously called types, styles, syndromes, or higher order dimensions, and the level of individual items. Each personality disorder may be thought of as consisting of a set of such trait characteristics. Conversely, the covariation of a particular set of personality traits may be thought of as a personality disorder. There are, then, four levels of clinical interpretation within an inventory—item-level, trait-level, scale-level, and profile configuration.

Trait subscales are clinically useful. Recall that each personality syndrome is viewed in the prototypal model as a covariant attribute structure whose features, taken one by one, are neither necessary nor sufficient for the diagnosis of the syndrome. Although theoretically the most prototypal member of a syndrome possesses all its features, most individuals will not. As astute clinicians know, no two narcissistic personalities are exactly alike, no two antisocial personalities are exactly alike, and so on. In the *DSM–IV*, nine criteria are listed for the Borderline Personality Disorder, five of which are required for diagnosis. Conceivably, then, two individuals might both be diagnosed with the disorder, while having only one feature or criterion in common, allowing for considerable trait or criterion heterogeneity within any personality type. The specific personality traits that an individual possesses is of interest when we want to know what kind of schizoid the person is, what kind of dependent, and so on, a fact that is obviously relevant to the identification of adult subtypes described earlier. However, an individual may also receive specific disorder subscales in the absence of a diagnosis. Such elevations correspond to problematic trait characteristics that deserve attention but are not so pervasively expressed as to constitute full-fledged personality disorders. The *DSM* allows problematic traits to be noted on Axis II, but apparently this possibility is rarely used clinically, perhaps because the *DSM* is criterion-oriented rather than trait-oriented.

The existence of personality traits as a legitimate level of organization in human personality, and their utility in clinical interpretation, argues that they should be

represented in any personality disorders inventory. Because of its relative brevity, traits have not yet been explicitly represented in the MCMI. Instead, the structure of the inventory at levels before that of syndrome or disorder has drawn on an item-weighting system informed by the strength of each item's validational data, the intrinsic interrelatedness of the personality disorders, and the prototypal structure of mental disorders generally. An item weighting system ranging from 1 to 3 points was introduced in the MCMI–II; in the MCMI–III, prototypal items are given a weight of 2 points; all others are weighted 1 point only. Because the prototypal items demonstrate substantive, structural, and external validation (Loevinger, 1957) on their "home" scale they are given a higher weight than subsidiary items selected on the basis of external validation alone. Prototypal items represent features of their respective disorders and are doubly weighted. Nonprototypal items represent features that, although not central, are nevertheless relevant to their respective disorders. Thus, an item such as "I like to be the center of attention when I'm in a group," might be weighted 2 points on the Histrionic scale, and 1 point on the Narcissistic scale.

Such multiple assignments have caused some (Wiggins, 1982) to express concern regarding the discriminant validity of the MCMI scales. Exploratory studies (Davis, 1994) with the Millon Adolescent Clinical Inventory, designed according to the 3 – 2 – 1 weighting system, show that factoring the items assigned to each MCMI personality scale separately results in brief subscales that often share over half their items. Similar results would likely emerge for the MCMI–II. In contrast, the MCMI–III personality scales were designed to be shorter, using a 2 – 1 weighting system. Factor studies currently underway reveal, not unexpectedly, that the item overlap of the resulting MCMI–III factor traits is substantially more favorable to clinical use. The results of these inductive, or "bottom-up," studies must, of course, be examined in conjunction with theoretical, or "top-down" considerations, in order to appraise their value. Of course, trait subscales need not be designed for every MCMI Axis II disorder, but might instead be constructed only for those disorders of greater clinical relevance frequently seen in clinical settings—certainly the Antisocial, Borderline, and Paranoid, and perhaps the Narcissistic and Dependent, but not, for example, the Schizoid or Sadistic.

CONJOINT DEVELOPMENT AND REFINEMENT OF INSTRUMENTALITIES ACROSS DIVERSE DATA SOURCES

One of the fundamental principles in instrument construction is that validity should be built into an instrument from the beginning. Loevinger (1957), Jackson (1970), and Skinner (1986) discussed test construction as an iterative three-stage process. In the first, rational stage, the content of each construct to be measured is defined

as precisely as possible. Items may be written and refined by multiple so-called experts in the theory of the construct, sorted according to their discriminative characteristics, ranked in terms of difficulty level, and so on, all before being put to actual participants. In the second, internal stage, the items are given to real individuals. Various statistics are then calculated to ensure that the items tap a single dimension. Items with strong relationships to scales for which they were not intended may be deleted or reassigned. In addition, a correlation matrix of the instruments scales may be examined for anomalies and items reassigned or dropped in order to bring this pattern in line with theoretical expectations. In the third, external stage, the newly developed scales are assessed against other instruments of established reputation. Items that pass through all three stages are said to have been validated theoretically, statistically, and empirically. The Millon inventories have essentially been constructed according to this tripartite logic.

Although inventories should be constructed to mirror our expectations regarding relationships between constructs both internal and external to the instrument as precisely as possible, they should also possess a generative value. That is, an inventory should assist in the accumulation of new knowledge. If our test is intended to assess personality disorders, we might expect, for example, that individuals classified as dependent personalities will also be classified as experiencing depressive episodes more often than, say, antisocials, simply because dependents are likely to feel helpless and hopeless more often than antisocials, who take the initiative in changing their external world, albeit usually in a destructive fashion. Together, these internal–internal and internal–external expectations form a set of constraints that our inventory must be constructed to satisfy. Each such constraint is an additional point through which the instrument's predictions are triangulated with reality as it is assumed to exist. The larger this set of constraints, the better, for if the inventory can satisfy many such constraints at the beginning, then we can have greater confidence that it will meet future challenges.

Sometimes, for example, after an instrument has been constructed, certain variables about which we had no preformed ideas show a significant relationship. Perhaps in the beginning we believed that antisocial personalities should also report high family distress and a high incidence of alcoholism. Perhaps we also believed that dependents personalities should report overprotective parents and an inability to end relationships, and these expectations were built into the instrument. About the relationship between dependent personality and the incidence of alcoholism, however, we may have no expectations at all, so that the magnitude of this second relationship is "free to vary," simply because we do not know much about it, how it should be evaluated, or whether it should even exist at all. How do we evaluate this observed, but unexpected, relationship? Having constructed our instrument to satisfy multiple constraints in the form of theoretically driven expectations, we are no longer working with just any item pool. The more our test satisfies many different constraints, the greater our expectations of the generalizability of the entire system

of instrumentation. Demonstrated validity in diverse areas of the nomological network becomes a promissory note that observed relationships between intervening variables elsewhere is not peculiar to their particular mode of operationalization, but is instead representative of nature's structure and, so, worthy of genuine scientific interest. In general, the more constraints an instrument satisfies at the outset, the more confidence we can have in the validity of relationships that are unanticipated.

At the current time, most psychological instruments are developed within a single data source, be it self-report, clinical ratings, observer ratings, or projective, and then validated against instruments of already established utility within that same data source. Validation against instruments from other data sources, although important, is usually secondary. Thus, a new self-report scale to measure dependency finds evidence for its validity first against other self-report dependency scales, and then, against observer ratings and projectives, and so on. Lower correlations between self-report and rated forms are attributed to method considerations, and often rightfully so. Unfortunately, this rather haphazard style of instrument development often leads to confusing results where such instruments are paired against each other in a multitrait–multimethod matrix. The narcissistic scale of a self-report instrument may correlate more highly with the histrionic rating scale, and so on. Many such mismatches are likely to be found for any given set of personality instruments, a fact that has undermined confidence in the valid assessment of personality disorders.

A much better method blurs the distinction between internal and external by viewing test construction as a system of relations or constraints to be satisfied across multiple data sources. Here, the goal is to build an entire suite of instruments informed one by the others across the entire construction process. The more data sources that can be involved, the better. For example, a self-report inventory for the personality disorders, an observer-rated version of the same inventory, and a clinical checklist would be constructed simultaneously, not one at a time. Correlation matrices between all instruments would be inspected at every stage. Thus, if during development it was found that the observer-rated narcissistic scale correlated more highly with the self-report histrionic scale than with its parallel self-report narcissistic scale, indicating a lack of convergent validity, the items from both pools would be examined, not only with regard to their content characteristics and correlation to their assigned scale, but also in terms of their cross-method correlations. Violations of multitrait–multimethod considerations would be tracked to particular items, and these would be reassigned, dropped, or rewritten. Thus, rather than being examined post hoc, multitrait–multimethod considerations become a fundamental part of the item selection process, considered from the beginning, allowing each instrument to strengthen the others. Validity is built into an entire system of instrumentation, and not simply into a single instrument. Future versions of the MCMI will are likely to be constructed in this fashion.

What are the requirements for the construction of such a test suite? The first is essentially practical, reflecting a much larger investment on the part of participants, and the need for more iterations in the development process. Both patients and their clinicians must be subjected to the agonies of providing data for a large item pool. The second is theoretical, and is the more difficult of the two, requiring expert clinical judgment concerning the constructs the test seeks to embrace. The construction process is begun knowing that correlations between like scales across diverse data sources will be less than unity, and that this reflects measurement error as it does the informational biases of the respective sources. Personalities can be expected to differ in terms of their level of self-knowledge and the extent to which they distort objective information. The egocentricity of the Narcissist and his tendency to construe reality in ways favorable to self makes him less likely than the pessimistic and self-focused Depressive to provide valid self-report information. We might conjecture, then, that the correlation between self-reported and clinician-rated Narcissistic personality is likely to be less than that between self-reported and clinician-rated Depressive personality. And this is the problem the theorist faces. Knowing that the multitrait–multimethod matrix reflects informational biases as well as measurement error, the theorist must provide a substantive framework within which to evaluate the direction and magnitude of its correlations and to determine the path in which the results are best refined. In turn, this involves knowing (a) those traits or characteristics for which each personality can typically be expected to provide valid self-report information, (b) those traits or characteristics for which each personality cannot be expected to provide such information, (c) those traits or characteristics for which clinicians can typically be expected to provide valid ratings, and (d) those traits or characteristics that, for whatever reason, clinicians will not easily be able to rate.

Unfortunately, the *DSM*'s Axis II, deliberately formulated to be atheoretical, and so existing at a descriptive rather than explanatory level, cannot provide the substantive framework necessary to guide such research. Rather than providing a coherent deductive foundation within which to ask questions about the various personalities, Axis II is best viewed as a body of descriptive material collated across several perspectives, but not really coordinated with any of them. Although the periodic table is the unique province of chemistry, the problematic behaviors that are to be carved up into diagnostic categories are often given to psychopathologists by parties whose standards are extrinsic to psychopathology as a science. Perhaps we live in a more enlightened age, but was it not so long ago that Sullivan, a founder of the interpersonal school, proposed the "homosexual personality"? Or that the "masochistic personality" came under fire as reflecting biases against women? Philosophers of science agree that the system of kinds undergirding any domain of inquiry must itself be answerable to the question that forms the very point of departure for the scientific enterprise: Why does nature take this particular form rather than some other? Why these particular diagnostic groups rather than others?

One cannot merely accept any list of kinds or dimensions as given. Committee consensus is not science. Instead, a taxonomic scheme must be justified, and to be justified scientifically, it must be justified theoretically. Taxonomy and theory are intimately linked.

Item writers involved in attempts to construct a coordinated suite of multimethod instruments, future versions of the MCMI, and the Millon Personality Diagnostic Checklist (MPDC; Tringone, in press) require a strong theoretical basis on which the various personality disorders can be compared and contrasted for their manifestations across different data sources. Relevant example questions are "What traits does the narcissist possess about which he or she is likely to have self-knowledge and will admit to?," and "What traits does the narcissist possess about which he or she is unlikely to have self-knowledge?" For the authors, this basis is Millon's Evolutionary theory (Millon, 1990). Although a detailed exposition is beyond the scope of this article, the theory essentially seeks to explicate the structure and styles of personality with reference to deficient, imbalanced, or conflicted modes of ecological adaptation and reproductive strategy. Four domains or spheres in which evolutionary principles are demonstrated are labeled as Existence, Adaptation, Replication, and Abstraction. The first relates the serendipitous transformation of random or less organized states into those possessing distinct structures of greater organization; the second refers to homeostatic processes employed to sustain survival in open ecosystems; the third pertains to reproductive styles that maximize the diversification and selection of ecologically effective attributes; and the fourth concerns the emergence of competencies that foster anticipatory planning and reasoned decision making. Polarities derived from the first three phases—pleasure–pain, passive–active, and other–self, respectively—are used to construct a theoretically embedded classification system of personality disorders Personalities, which we have termed *deficient*, and which lack the capacity to experience or to enact certain aspects of the three polarities (e.g., the schizoid has a faulty substrate for both "pleasure" and "pain"); those spoken of as *imbalanced* lean strongly toward one or another extreme of a polarity (e.g., the dependent is oriented almost exclusively to receiving the support and nurturance of "others"); and those we judge as *conflicted* struggle with ambivalences toward opposing ends of a bipolarity (e.g., the passive–aggressive vacillates between adhering to the expectancies of "others" versus enacting what is wished for one's "self"). Figure 1 illustrates the place of the *DSM* personality disorders within the polarity model. These polarities lend the model a holistic, cohesive structure that facilitates the comparison and contrast of groups along fundamental axes, sharpening the meanings of the derived constructs, preventing their definitions from being co-opted by one perspective or school to the exclusion of others, and "fixing" them against construct drift.

In addition to providing a polarity model by which to derive the entire constellation of personality disorders, Millon and associates have also stressed that personality is an intrinsically multioperational construct. That is, personality dis-

	Existential Aim		Replication Strategy		
	Life Enhancement	Life Preservation	Reproductive Propagation	Reproductive Nurturance	
Polarity	**Pleasure - Pain**		**Self - Other**		
Deficiency, Imbalance, Conflict	Pleasure - Pain - +	Pleasure Pain (Reversal)	Self - Other +	Self + Other -	Self - Other (Reversal)
Adaptation Mode	**DSM Personality Disorders**				
Passive: Accomodation	Schizoid / Depressive	Masochistic	Dependent	Narcissistic	Compulsive
Active: Modification	Avoidant	Sadistic	Histrionic	Antisocial	Negativistic
Structural Pathology	Schizotypal	Borderline, Paranoid	Borderline	Paranoid	Borderline, Paranoid

FIGURE 1 The polarity model.

orders are not simply about behavior, or about cognition, or about unconscious conflicts, but rather, as disorders of the entire matrix of the person, embrace all of these data domains. In past (Millon, 1986a) and current writings (Millon & Davis, 1995), Millon and associates have set forth comprehensive (exhaustive of the major domains of personality) and comparable (existing at approximately equal levels of abstraction) attributes for eight functional and structural domains of the personality. Each cell of the resulting 8 × 14 Domain × Disorder matrix contains the diagnostic attribute that in the authors' judgment best captures the expression of each personality style within that particular domain (see Figure 2). The columns of the matrix suggest a comparison and contrast of the personality disorders within a particular content area, while its rows suggest a comprehensive picture of each ideal type, the total expression of each personality. The first gets at discriminate validity; the second at convergent validity.

In contrast, the criteria of the *DSM–IV* are both noncomprehensive (no real scheme through which to meaningfully distribute personality attributes has been developed) and noncomparable (the criteria run the gamut from very broad to very narrow). Noncomprehensive criteria lead to redundancies and omissions. Noncomparable criteria lead to a mixture of levels. Consider, for example, the dependent personality disorder. Criterion 1 states "Has difficulty making everyday decisions without an excessive amount of advice and reassurance from others." Criterion 2, however, says almost the same: "Needs others to assume responsibility for most major areas of his or her life." In fact, five of the eight dependent personality criteria seem oriented toward the interpersonal conduct domain, two seem oriented toward the self-image domain, and only one is concerned with cognitive style, leaving the domains of regulatory mechanisms, object representations, morphologic organization, mood/temperament, and expressive acts completely unaddressed. Consider the obsessive-compulsive personality disorder. Criterion 5 is relatively narrow and behavioral: "Is unable to discard worn-out or worthless objects even when they have no sentimental value." In contrast, criterion 8 requires more inference: "Shows rigidity and stubbornness." In fact, the inability to discard worthless objects could well be considered simply a behavioral manifestation of the trait of rigidity.

Failure to multioperationalize the personality disorders via comprehensive and comparable attributes almost certainly contributes to diagnostic inefficiency and invalidity, and provides a critique of the content validity of the *DSM–IV* criteria sets. Even more problematic, because the *DSM* is usually taken as the "gold standard" by which other measures of personality disorder are judged, and because most modern measures seek to conform to the *DSM* in some way, the degree to which these criteria sets distort the practice of modern clinical science is an open question—there is no gold standard for the gold standard. Because most test authors consider it necessary to construct their instruments in accordance with the diagnoses and criteria of the *DSM–IV*, we can conclude that almost every extant instrument that emphasizes the *DSM* is to an unknown extent contaminated by this problem,

	Behavioral Acts	Interpersonal Conduct	Cognitive Style	Self-Image	Object Representations	Regulatory Mechanisms	Morphologic Organization	Mood/ Temperament
Schizoid	Impassive	Unengaged	Impoverished	Complacent	Meager	Intellectualization	Undifferentiated	Apathetic
Avoidant	Fretful	Aversive	Distracted	Alienated	Vexatious	Fantasy	Fragile	Anguished
Depressive	Disconsolate	Defenseless	Pessimistic	Worthless	Forsaken	Asceticism	Depleted	Melancholic
Dependent	Incompetent	Submissive	Naive	Inept	Immature	Introjection	Inchoate	Pacific
Histrionic	Dramatic	Attention-Seeking	Flighty	Gregarious	Shallow	Dissociation	Disjointed	Fickle
Narcissistic	Haughty	Exploitive	Expansive	Admirable	Contrived	Rationalization	Spurious	Insouciant
Antisocial	Impulsive	Irresponsible	Deviant	Autonomous	Debased	Acting-Out	Unruly	Callous
Sadistic	Precipitate	Abrasive	Dogmatic	Combative	Pernicious	Isolation	Eruptive	Hostile
Compulsive	Disciplined	Respectful	Constricted	Conscientious	Concealed	Reaction Formation	Compartmentalized	Solemn
Negativistic	Resentful	Contrary	Skeptical	Discontented	Vacillating	Displacement	Divergent	Irritable
Masochistic	Abstinent	Deferential	Diffident	Undeserving	Discredited	Exaggeration	Inverted	Dysphoric
Schizotypal	Eccentric	Secretive	Autistic	Estranged	Chaotic	Undoing	Fragmented	Distraught or Insentient
Borderline	Spasmodic	Paradoxical	Capricious	Uncertain	Incompatible	Regression	Split	Labile
Paranoid	Defensive	Provocative	Suspicious	Inviolable	Unalterable	Projection	Inelastic	Irascible

FIGURE 2 Attributes within each functional and structural domain.

a consideration that argues strongly for the role of theory as a guide when selecting attributes, criteria, or items by which to operationalize personality disorders.

Obviously, its atheoretical shortcomings, together with its noncomprehensive and noncomparable format, makes the *DSM* difficult to regard even now as a gold standard for the MCMI–II, MCMI–III (which actually features many items as rephrases of the official criteria), and Millon Personality Diagnostic Checklist. Because of its theoretical anchoring, the MCMI and MPDC are perhaps best regarded as measures of the *DSM* constructs, but more, the "more" being the surplus meaning provided by the theory. However, as the theory continues to evolve along the lines necessary to construct a coordinated suite of instruments (of which the MCMI will be only one essential leg), the relationship between future MCMIs and the *DSM–IV* will require close consideration, and perhaps even a re-evaluation. That an atheoretical, but official, classification should act as the criterion against which a theoretically grounded system is judged can only be described as a paradox, one faced not only by integrative theorists, but by interpersonal and psychodynamic thinkers, as well.

CONCLUSIONS

Although we have chosen to review only a select set of present theoretical and empirical fronts, additional developments in the "Millonian tradition," unfortunately beyond the scope of this article, will undoubtedly influence the direction and content of future inventories, indirectly at first, but more directly as time proceeds. One of these is the formation of a Research Network to coordinate researchers interested in Millon's theory and inventories, using the rapidly developing resources of the Internet (for information, e-mail iaspp@aol.com). These advances in communications technology, with the ability, for example, to pilot large numbers of items with readily obtained, sizable samples gathered from sites as small as the individual private-practice clinician and as large as the largest hospital or university setting, will undoubtedly speed the development, validation, and coordination, of inventories of all types.

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