

# MANDALA SYMBOLISM IN PSYCHOTHERAPY: THE POTENTIAL UTILITY OF THE LOWENFELD MOSAIC TECHNIQUE FOR ENHANCING THE INDIVIDUATION PROCESS

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*ABSTRACT:* Mandala symbolism historically has strong links to Jung's individuation process and transpersonal psychology. Although a variety of constructive techniques may be used for creating mandalas to reflect and/or enhance an individual's level of psychological wholeness and integration, the Lowenfeld Mosaic Technique (LMT) has received little attention for its potential utility in this area. The purpose of this article, which draws upon the literature as well as the author's experiences as a clinician, is to discuss mandala symbolism in the context of the LMT, and how the LMT might be used as an assessment procedure as well as a dynamic, interactive tool for promoting insight and self-understanding. A case example from the literature is provided, which illuminates how the technique was used and useful in enhancing the individuation process for a female client struggling with and exploring various personal and transpersonal issues. Limitations of the technique are also discussed, as well as needs for future research.

Carl Jung is widely considered to be the first prominent transpersonal psychologist, and "his work in the transpersonal realm prefigured much of what is current in the field" (Scotton, 1996, p. 39). Historically, therefore, a substantial degree of overlap has existed between Jungian analytical psychology and transpersonal psychology (Brookes, 1980; Levy, 1983). Both orientations emphasize that psychological development should include growth to increasingly higher levels of consciousness, that the transcendent lies within and is available to all persons, the integration of various wisdom traditions, and the importance of addressing transpersonal as well as personal issues, problems, and concerns (Scotton, 1996). Although there are also important differences between these two approaches (Levy, 1983; Walsh & Vaughan, 1980), it is useful for those who incorporate a transpersonal perspective in their work to be familiar with Jung, particularly his concept of individuation. Jung's psychology (like the psychologies of Grof, Wilber, Assagioli and others) may be viewed as one form of – or approach to – transpersonal psychology (Cortright, 1997).

The purpose of this article is to discuss how the individuation process might be reflected and/or enhanced in psychotherapy through the construction of mandalas. While many readers may be familiar with Jung and the individuation process, as well as with mandalas, this article will illustrate this process by focusing on the

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Lowenfeld Mosaic Technique (LMT), a potentially useful but currently underutilized device that may be used as an assessment procedure as well as a dynamic, interactive tool for promoting insight and self-understanding. Before discussing the LMT, however, a brief discussion of the individuation process and the possible roles of mandala construction in it is provided.

#### THE INDIVIDUATION PROCESS

From the perspective of Jung's analytical psychology, psychotherapy is primarily an individuation process. That is, "the process by which the consciousness of a person becomes individualized or differentiated from other people" (Hall & Nordby, 1973, p. 34). Similar to Maslow's (1971) concept of self-actualization and Assagioli's (1993) notion of the Higher Self, the primary purpose of individuation is to become more conscious; to "know oneself" as completely as possible (Hall & Nordby, 1973) and ultimately to transcend ordinary individual consciousness and concerns. Assisting clients in therapy to forge a conscious relationship to the Self – in other words, to enhance their level of individuation – is one of the primary goals of analytical psychology. The Self – a term coined by Jung reflecting the Hindu Upanishads and its depiction of the higher personality, or atman (Stein, 1998) – is considered to be the central archetype of the collective unconscious and serves as the organizing principle of the individual personality (Hall & Nordby, 1973). Although the most familiar way the Self can make its presence known in Jungian work is through dream imagery, this is not the only way. Another possibility, one that is arguably the most prominent image of the Self and which had a particular fascination for Jung (Clarke 1994; Smoley & Kinney, 1999), is the mandala.

#### MANDALA SYMBOLISM AND INDIVIDUATION

The word *mandala*, Sanskrit for "circle" (more specifically, a magic circle; Singer, 1994), refers to a circular pattern that has been found in cultures all over the world and throughout history (Moacanin, 2003; Singer, 1994), dating back at least to the Paleolithic era (Gardner, 1980). Jung's first discussion of mandalas occurred in his 1929 commentary to Richard Wilhelm's translation and explanation of the Taoist text *The Secret of the Golden Flower* (Wilhelm & Jung, 1962). Mandalas are frequently associated with eastern religions and philosophies, including Buddhism (e.g., Tibetan Buddhism) and Hinduism (e.g., Kundalini yoga), where they often were and are used for meditation and contemplative purposes (Clarke, 1994). However, mandalas have also frequently appeared in western culture, including European artwork (Jaffe, 1964), and have clear affiliations with Christianity (Edinger, 1987; 1992), Gnosticism (Hoeller, 1989), early Navajo and Pueblo American Indian cultures (Clarke, 1994), and western esoteric traditions such as alchemy (Jung, 1980; McLean, 2002) and shamanism (Smoley & Kinney, 1999). Mandalas also have been incorporated into particular forms of psychotherapy. For example, Grof (1985) has frequently used mandalas to assist in the integration of breathwork sessions in the context of holotropic therapy.

A mandala "expresses the totality of the psyche in all its aspects, including the relationship between man and the whole of nature" (Jaffe, 1964, p. 266), and may be

regarded as “an archetypal symbol reflecting the common neuropsychological inheritance of humankind” (DiLeo, 1983, p. 13). It also represents “the center of personality, a kind of central point within the psyche, to which everything is related, by which everything is arranged, and which is itself a source of energy” (Jung, 1959, p. 357). For Jung and others, mandalas often symbolize the Self, and appear symbolically to represent the striving for individuation, wholeness, and psychological integration through the reconciliation and unification of opposites (Arguelles & Arguelles, 1972; Clarke, 1994; Edinger, 1992; Fontana, 1993; Jung, 1959; Moacanin, 2003; Tucci, 2001).

From the perspective of analytical psychology, the Self – conscious and unconscious – is differentiated from the ego (the conscious “I” with whom individuals normally identify), and psychotherapy is often required when the ego and the unconscious are split or dissociated (Smoley & Kinney, 1999). Overcoming this split, and forging a more conscious relationship to the Self to achieve greater individuation, is a fundamental purpose of analytical psychotherapy (Singer, 1994). Many psychotherapists (e.g., Singer, 1994), including Jung, who discovered that mandala images frequently occurred in the dreams and fantasies of his clients (Clarke, 1994), have found that the construction of mandalas – particularly when drawn spontaneously – may be useful in the individuation process. Indeed, “the mandala image is not only a *symbol* of wholeness and healing, but can be actively employed as a means toward that end” (Clarke, 1994, p. 139).

#### CONSTRUCTION OF MANDALAS IN PSYCHOTHERAPY

It has long been recognized within both Jungian and transpersonal psychology that self-expression through artistic, visual means potentially can be therapeutic (Mellick, 2001), and that an individual’s “most fundamental thoughts and feelings, derived from the unconscious, reach expression in images rather than in words” (Naumburg, 1980, p. 511). In particular, the construction of mandalas, whether or not such constructions are consciously intended, may be beneficial for some individuals (Jung, 1972). Jung, for example, drew mandalas himself (Jung, 1965), observed that mandala images often appeared in the drawings of the mentally ill (Clarke, 1994), and frequently solicited mandala drawings and paintings from individuals he was treating in therapy, largely because he believed this activity often had a soothing effect on his clients (Hall & Nordby, 1973) and led to an increased sense of psychological integration (Clarke, 1994).

In one case, for example, a woman undergoing psychotherapy with Jung made a series of watercolor paintings of mandalas. Her treatment, which included an analysis of the successive mandala paintings she completed, led to a positive therapeutic outcome and the enhancement of her individuation process (Hall & Nordby, 1973). Similarly, Singer (1994) described a case in which an adult male client, unable to express verbally his emotions and experience or to fully communicate the impact certain dreams were having upon him, drew a picture in the form of a mandala. With the assistance of a therapist, the client began engaging in verbal associations to what he had drawn, and both the client and the therapist viewed this process as critical in the client’s eventually successful treatment.

In addition to painting and drawing, other techniques for constructing mandalas, such as sandplay techniques (Lowenfeld, 1950), have been utilized by Jungian and transpersonal psychologists. One technique that may be useful for creating potentially therapeutic mandalas and enhancing the individuation process, but that to date has received little attention for its possible utility in this area, is the Lowenfeld Mosaic Test. The Mosaic Test may be particularly valuable in this regard because it has the unique characteristic of being both an assessment tool as well as a dynamic, interactive method for promoting insight (Miller & Ruskowski, 2003).

### THE LOWENFELD MOSAIC TEST (LMT)

The Lowenfeld Mosaic Test (LMT), also known as the Lowenfeld Mosaic Technique (because it has no right or wrong answers the LMT is probably more accurately regarded as a technique rather than a test), is a projective technique that has been in existence for over 75 years. Originally developed by Margaret Lowenfeld (1954) in 1929, it was widely used during the first half of the 20<sup>th</sup> century for a variety of assessment and diagnostic purposes, including traumatic brain injury and organicity (Colm, 1948; Wertham, 1950), schizophrenia and other mental disorders (Dorken, 1952; Kahn, Cameron, & Giffen, 1975; Wertham, 1950), and school readiness (Ames, 1963). Its use since then, however, quickly declined, presumably because of the increased popularity of more behaviorally-oriented assessment procedures (Perticone & Tembeckjian, 1987) and the limited studies in support of its reliability and validity as a diagnostic instrument. In recent decades, however, renewed interest in the LMT has arisen, particularly as a projective technique for assessing individuals' functional capability (Ames, 1986; Miller, in press), for attaining a greater understanding of the individual and the unique way in which a person experiences his or her world (Miller & Ruskowski, 2003; Perticone & Tembeckjian, 1987), and as a potentially useful tool in psychotherapy (Miller & Ruskowski, 2003; Perticone & Tembeckjian, 1987; Ruskowski, 1992; Ruskowski & Miller, in press; Woodcock, 1984, in press). In the context of psychotherapy, the LMT may be especially useful for therapists whose theoretical frameworks incorporate Jungian and transpersonal perspectives (Perticone & Tembeckjian, 1987). A basic overview of the administration and interpretation of the LMT is provided below.

### LMT: ADMINISTRATION AND INTERPRETATION

The LMT consists of 456 tiles of assorted geometric shapes and six colors: red, black, yellow, green, blue, and white. The tiles are arranged systematically in a small, portable box. The individual being assessed with the LMT is asked to "make something with the tiles" on a standardized-size tray placed in front of him/her. "The psychologist then notes not only the final product constructed by the subject, but his/her entire manner of approaching the task" (Ruskowski, 1992, pp. 33–34). The examiner also simultaneously and carefully observes and monitors a number of pertinent variables, including "the amount of time devoted to the task, the spontaneous questions or comments offered, the method of handling the tiles, [and] the ease or difficulty with which the subject becomes involved with the test

materials,” all of which “are regarded as significant data from which useful hypotheses may be generated” (Ruskowski, 1992, p. 34). Following the individual’s completion of a mosaic, an enquiry is typically conducted in which the client is asked to respond to questions regarding the mosaic construction (e.g., “What did you make?”; “What does your design make you think of?”; “What does your design make you feel?”). During this phase of the assessment, the examiner carefully observes the client for signs of parallel communication, including the possible symbolic implications of particular verbalizations or behaviors.

After the enquiry is completed, the resulting design is later traced and colored by the examiner so that a permanent record of it is preserved. Normative data are available for color usage and mosaic design constructions for children and adolescents ages 2–16 (Ames & Ilg, 1962; Perticone & Tembeckjian, 1987). Although these should be consulted prior to making any interpretive hypotheses, the LMT has no formal scoring system. Instead, mosaic designs are classified by type (e.g., representational designs; non-representational designs with pattern; non-representational designs without pattern; mixed designs). Hypotheses are generated based on this classification system as well as consideration of special design features (e.g., compactness; location; three-dimensional effects) and other variables (e.g., response time; use of color) in relation to the individual’s overall response pattern (Perticone & Tembeckjian, 1987; Ruskowski, 1992).

Hypotheses derived from mosaic constructions should not be applied in a mechanistic, “cookbook” fashion, but should instead be viewed as “points of departure for the examiner’s thinking about what the subject’s behavior *might* mean” (Perticone & Tembeckjian, 1987, p. xvii). As such, the hypotheses generated may be supported, modified, or even discarded based on the use of other techniques employed by the examiner or therapist (Perticone & Tembeckjian, 1987). Further, “the informal nature of the task is conducive to the exploration of feelings and thoughts that may be further amplified through synthesis with other assessment measures” (Miller & Ruskowski, 2003, p. 122). For example, using the LMT in conjunction with the Rorschach has frequently been recommended, as the latter often is considered more useful for assessing how an individual perceives the world whereas the former may be more useful for assessing how an individual actually functions in it (Ames, 1986).

Additionally, “while the Rorschach provides an opportunity to see the personality in reaction to complex intellectual and emotional stimuli, the Mosaic provides a greater opportunity to observe, in a quick and direct way, the personality in *spontaneous* action” (Colm, 1948, p. 232). Although the LMT has not demonstrated adequate statistical reliability and validity for diagnostic purposes and should therefore not be used for the classification of psychological disorders (Miller & Ruskowski, 2003), it may be useful for supporting a diagnosis once it has been made and for enhancing the understanding of the therapist regarding an individual’s unique experience and personality structure (Perticone & Tembeckjian, 1987).

Because of its projective nature, the LMT presents an individual with a potentially unlimited number of response possibilities. As a result, “the individual’s awareness of the examiner’s purpose – and hence the potential inclination to produce

‘appropriate’ or ‘socially acceptable’ responses – is minimized. It is hypothesized, therefore, that the subject will exhibit in the test situation his/her characteristic manner of bringing structure to an ambiguous situation, his/her method of problem-solving, and that his/her responses will contain hints, if not frank expressions, of current preoccupations and conflicts” (Ruskowski, 1992, p. 34). As with any projective technique, it is assumed that individuals being assessed with the LMT will be forced to rely on “highly personal sets, expectancies, and attitudes” (Perticone & Tembeckjian, 1987, p. 11), and that as a result the individual will utilize both conscious and unconscious defenses in the assessment situation.

Effective administration and interpretation of the LMT requires that the examiner or therapist have an acute understanding of human dynamics as well as highly developed observation skills (Perticone & Tembeckjian, 1987). When observing clients in the act of creating their mosaics, the examiner should be engaged in what Perticone (2001) refers to as “enhanced noticing” and Reik (1948) referred to as “free-floating” or “poised” attention; that is, maintaining a heightened level of awareness by simultaneously attending to multiple variables – including one’s reaction to them – within the assessment or therapeutic context. This division of attention, which also is a characteristic feature of the Buddhist concept of mindfulness (Moacanin, 2003; Weiss, 2004), the “Fourth Way” approach (e.g., self-remembering) of Gurdjieff and Ouspensky (Burton, 1995; Lachman, 2004; Ouspensky, 1949, 1971; Tart, 1986), and other eastern (Walsh, 1999) and western (de Mello, 1992) contemplative disciplines, is a critical element in developing an enhanced level of awareness. By failing to engage in or maintain this level of awareness, valuable albeit subtle clues to the client’s unconscious conflicts may be overlooked.

Conducting meticulous observations of the client during his/her mosaic construction is critical, as it is assumed that *all* behavior (verbal and non-verbal) is meaningful, that *no* behavior is accidental, irrelevant, or capricious, and that the role of the examiner “is to observe and interpret the manner in which the individual expresses his or her uniqueness” (Miller & Ruskowski, 2003, p. 121). Such an approach places great emphasis on the careful observation of the living person rather than simply his or her completed product (Perticone, 1998). For example, it is assumed that the particular manner in which an individual constructs a mosaic – the unique “flow” of each individual’s idiosyncratic response style, as well as the sequence in which particular tiles are selected and placed (the interpretation of which is a process known as sequence analysis) – will provide as much, or even greater, interpretive material as the final product (Perticone & Tembeckjian, 1987). As such, an idiographic, phenomenological, person-centered approach to assessment is emphasized (Lerner, 2000), and the utility of the LMT is evaluated from an experiential rather than a normative framework (Miller & Ruskowski, 2003).

Readers interested in a more comprehensive review of the historical usage of the LMT, as well as research conducted with it, are referred to Ames (1986) and Perticone and Tembeckjian (1987). Readers interested in a more complete discussion of the administration and clinical interpretation of the LMT are referred to Lowenfeld (1954), Anderson and Hood-Williams (1985), Ruskowski (1992), and especially to Perticone and Tembeckjian (1987), which provides the most comprehensive discussion of the clinical and projective aspects of the LMT currently available.

#### UTILITY OF THE LMT: ASSESSMENT

When used in the manner described above, the LMT would appear to have many advantages. For example, in the context of assessment, although other techniques such as human figure drawings (Hammer, 1980) and the Bender-Gestalt Test (Perticone, 1998) can be interpreted projectively, both of these procedures are more structured and likely elicit more response sets than the more ambiguous LMT (Perticone & Tembeckjian, 1987). Additionally, the LMT may be less likely to meet with client resistance than other projective techniques, such as the Rorschach or the Thematic Apperception Test (TAT). As both the Rorschach and the TAT require extensive verbal responding, and can therefore be either overtly or covertly resisted, the LMT can be used and interpreted based on what is directly observed rather than what is reported or described (Ruskowski, 1992).

The largely non-verbal nature of the LMT makes it ideal for use with those individuals who may be verbally limited, inarticulate, shy, and/or withdrawn. Similarly, the LMT may be less culturally biased than other, more verbally dependent assessment instruments. The LMT has been used successfully with non-English speaking populations, including individuals in Italy (Cusinato, 1980), India (Bhargava, 1997; Pani & Mishra, 1995), and Japan (Abel, 1982–1983), and has been used to examine cultural differences (Woodcock, 1986, in press). Further, because the LMT contains no “correct” or “incorrect” responses and therefore is not susceptible to practice effects, it can be repeatedly administered to the same individual without sacrificing clinical validity or interpretive value (Ruskowski, 1992).

#### UTILITY OF THE LMT: PSYCHOTHERAPY

In the context of psychotherapy, perhaps one of the most valuable aspects of the LMT is its utility for overcoming client resistance and fostering insight (Perticone & Tembeckjian, 1987). Clients often experience conscious or unconscious blocks in verbally articulating their thoughts and feelings, and shifting modalities of communication from verbal to non-verbal approaches, as can be done with the LMT, may often be therapeutic. For example, Ruskowski and Miller (in press) describe a case in which an adult male, after completing a mosaic, expressed astonishment at the degree to which the LMT was able to evoke strong images and emotions. The therapist helped the client to understand that his experience involved a process that “was not inherent in the plastic tiles but in the client himself. He had created an external, condensed symbol which helped to elicit, focus, organize, and ultimately to verbalize his own unarticulated inner conflicts” (p. 5).

Additionally, asking clients what they experienced during the construction of their mosaic, or what the significance of the end product might be, may reveal areas of preoccupation or conflict, particularly when the significance of certain mosaic constructions remains obscure (Perticone & Tembeckjian, 1987). By encouraging clients to free associate to their completed mosaic, the therapist and client may gain added insight into unconscious, unresolved issues, potentially including those of a transpersonal nature (Perticone & Tembeckjian, 1987). The following case example illustrates how the LMT may be used to elucidate and resolve personal and

transpersonal conflicts, monitor progress in therapy, and enhance the individuation process. This particular case example was chosen because it nicely describes how mandala symbolism may be revealed in psychotherapy, and because the therapist in this case (E.X. Perticone) is considered, based on his published work and extensive clinical experience with the LMT, to have particular expertise in its clinical and projective use.

#### MANDALA CONSTRUCTION WITH THE LMT: A PSYCHOTHERAPY CASE EXAMPLE

Perticone and Tembeckjian (1987) reported the following case, in which the creation of a mandala-like mosaic design and verbal associations to it appeared to lead to a beneficial therapeutic outcome for a female client. At the time of her mosaic construction, the client (age 48) had been in therapy for approximately 6 months, and had experienced several career- and family-related problems. She also had expressed increased interest in existential and transpersonal concerns, including her spiritual development. Because in one particular therapy session the client was having difficulties effectively communicating her emotions and her experience, the therapist suggested that she complete a mosaic.

As she began this process, the client spontaneously stated that “I’m not in art . . . I don’t know what I’m making . . . Nothing fits . . . I thought I would make a stained glass window, but . . . I don’t know what I’m doing here.” The woman’s completed mosaic consisted of 3 yellow tiles, 3 green tiles, and 6 red tiles placed within 12 blue triangular tiles, which were projected outward and placed in a circular position outside of and surrounding the other colored tiles. Several other pieces were selected by the client, but were left unused and scattered on the tray. When asked by the therapist what she had made, the client responded, “I don’t know. It’s supposed to be a crown.” The therapist then asked the client some questions regarding her design and the experiences, emotions, and thoughts that resulted from it, some of which is reported below:

*Therapist:* What are you experiencing now?

*Client:* I feel like crying. Isn’t that awful? Why am I crying? (The client alternatively laughs and cries.)

*Therapist:* And what are you thinking now?

*Client:* I feel like I’m in kindergarten.

*Therapist:* Tell me about that.

*Client:* I never went to kindergarten because my mother wouldn’t let me go (notice the double meaning implied by this statement).

*Therapist:* What else comes to mind?

At this point, the client began disclosing numerous unresolved conflicts with her mother and became openly emotional, exhibiting much affect.

*Therapist:* And what does the design make you think of?

*Client:* A stained glass window . . . Warmth . . . Beauty.

*Therapist:* You also said it might be a crown.

*Client:* Yes . . . A crown . . . Christ.

*Therapist:* What else does the design suggest?

*Client:* Mother (the client begins to cry) . . . Pain (p. 128).

As described by Perticone and Tembeckjian (1987), further associations indicated the woman's enhanced insight into (a) specific unresolved conflicts and hostility dating from childhood experience (centrally placed tiles of yellow and red, the combination of which is often hypothesized to suggest the presence of anger and hostility) that were intermingled with fewer, more pleasant memories (presence of green tiles, often hypothesized to be a symbol of health and vitality), (b) her desire to become more spiritually fulfilled (the prominent use of the color blue often is hypothesized to symbolize placidity and calm, and the use of this color in a circular pattern is frequently viewed as suggesting a spiritual orientation; association of the crown with Christ; circle of blue triangles pointing outward is often hypothesized to suggest strivings for self-knowledge and understanding), and (c) the need to "clean up" unsettled and distracting issues associated with practical problems in her family and work situations (unused tiles left scattered on the tray).

Used in this way, the LMT appeared to be a helpful mechanism for assisting the client to symbolically and then verbally articulate, through construction of a mandala-like design, particular unresolved, unconscious issues in both personal and transpersonal domains. Further, the technique provided the therapist with the opportunity to gain a greater understanding of the client through the indirect and subtle messages the client unconsciously communicated about herself, and to enhance the therapist's empathy toward the client and her experience. This increased understanding and empathy on the part of the therapist led to the formulation of specific intervention strategies, including those of a transpersonal nature (e.g., exploring with the client various aspects of her spiritual identity and development through dream imagery and interpretation) that would later be effectively implemented in the client's therapy (Perticone & Tembeckjian, 1987).

In the author's own clinical experience, he has found that client creations of mandala-like designs are often associated with therapeutic progress. In particular, as clients' level of subjective distress decreases as a result of psychotherapy, there often is a parallel improvement in the quality of their mosaic constructions. For example, some clients who produce disjointed, disorganized mosaics in the initial stages of therapy (presumably reflecting the chaotic aspects of their psychological experience at that time) often produce more balanced, aesthetically-pleasing, mandala-like designs in the later stages of therapy (presumably reflecting a greater level of wholeness and psychological integration).

From a Jungian and a transpersonal perspective, the LMT may therefore be viewed

as a potentially useful procedure for enhancing the individuation process and for attaining a greater understanding of the person and the unique way in which an individual experiences his or her world (Miller & Ruskowski, 2003). Such an approach may incorporate psychodynamic, Jungian, and transpersonal orientations, and is consistent with a more holistic, integrated approach to psychology than is typically seen in traditional western psychology (Tart, 1983).

#### NEEDS FOR FUTURE RESEARCH

When used in the clinical, projective manner described in the case example above, the clinician using the LMT bases its value primarily on his or her professional experience with it rather than its psychometric properties. From this perspective, “the examiner is seen as a vital ingredient, and the role accorded him or her is far broader and less prescribed” (Lerner, 2000, p. 41) than in a more standardized approach to assessment and treatment. As with other projective techniques, the usefulness of the LMT is largely dependent on the knowledge, skill, and experience of the examiner who uses it (Miller, in press).

Although clinical experience suggests the LMT may be useful for supporting a diagnosis once it has been made and for broadening the clinician’s understanding of how a client experiences his or her world (Perticone & Tembeckjian, 1987), empirical data regarding the statistical reliability and validity of the LMT for diagnostic purposes or in the context of psychotherapy as described above is currently limited. Despite criticisms leveled at traditional psychometric approaches to assessment and the call for alternative conceptualizations (e.g., Friedman & MacDonald, 1997), given current assumptions and values of orthodox, western psychology (Tart, 1983) and the value placed by academicians on statistical analysis and evaluation, it is clear that more research regarding various reliability and validity indices of the LMT is needed before its use is likely to become more widely accepted.

Research is needed both in traditional areas of reliability and validity (e.g., test-retest reliability; construct validity) as well as newer, evolving areas, such as the LMT’s degree of incremental validity (i.e., the degree to which it contributes to understanding beyond that which is already known) and treatment validity (i.e., the degree to which its use contributes to a beneficial treatment outcome). Research with the LMT also should focus on aspects for which it is best suited (e.g., assessing progress in therapy) rather than on purposes for which it is less likely to be useful (e.g., clinical diagnosis). Further, research is needed to identify those variables that separate skillful clinicians/therapists from less successful ones, particularly the processes underlying the effective clinical use of the LMT. For example, although the psychometric aspects of projective techniques have been consistently criticized (Dawes, 1994), even committed statisticians and empiricists have been “shocked” at the accuracy, clinical skill, and “intuitive feeling” exhibited by some clinicians using projective instruments, and “a highly trained expert may astound even the most critical scientist” (Kaplan & Saccuzzo, 1997, pp. 442–443). Research is needed to identify such experts, as well as their clinical skills and how these are employed in assessment and therapy contexts.

## CONCLUSIONS

Jung (1965) viewed the mandala as being “the path to the center, to individuation” (p. 196). Individuals who construct circular and mandala-like designs often are concerned, frequently at unconscious levels, with transpersonal issues related to self-understanding, self-actualization, and psychological integration (Perticone & Tembeckjian, 1987). The individuation process, which often becomes more pronounced during the second half of life (Singer, 1994), may be potentially reflected and/or enhanced through utilization of the LMT. Although currently underutilized as both a projective technique and as a tool for promoting insight, the LMT would appear to be particularly useful for those psychologists whose theoretical orientations include Jungian and transpersonal perspectives. However, given the clinical skill required to effectively use the LMT, and because it lacks traditionally accepted reliability and validity data (Miller & Ruskowski, 2003), the LMT should clearly be viewed as an experimental technique and should only be used in conjunction with other assessment and therapeutic procedures. As such, clinicians are encouraged to be cautious in their interpretations of individual mosaic constructions.

Moreover, as with other projective techniques, the LMT and those who use it are vulnerable to a number of criticisms (Panek, 2001), including possibilities of illusory correlations between assessment responses and client behavior (Gresham, 1993), and the potential for overconfidence in the accuracy of one’s clinical intuition (Myers, 2002) and judgment (Dawes, 1994; Garb, 2005) when making assessment and therapeutic decisions. These criticisms underscore the need for those using the LMT to do so in an appropriate, skillful, and ethical manner. However, given its flexibility, the brief time typically required for its administration, and its potential clinical utility, the LMT appears to have much to recommend it. Those therapists who acquire appropriate training and experience with the LMT may find it a welcome addition to their techniques and methods for working with clients struggling with unresolved, unconscious conflicts in both personal and transpersonal domains.

## NOTE

For those interested in acquiring the LMT, kits may be purchased from Dr. H. Beric Wright, Chairman of the Dr. Margaret Lowenfeld Trust. Dr. Wright may be contacted at: Brudenell House, Quainton, Aylesbury Bucks HP22 4AW, United Kingdom. Those interested in acquiring the text *The Mosaic Technique in Personality Assessment: A Practical Guide* by Perticone and Tembeckjian (1987), which is currently out of print, may contact either Dr. Eugene Perticone (55 Jackim Road, Oswego, New York 13126; e-mail: epertico@twcny.rr.com) or Dr. John Ruskowski (83 Jackim Road, Oswego, New York 13126; e-mail: jruskows@twcny.rr.com).

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