

## Mapping from a Different Direction: Mandala as Sacred Spatial Visualization

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**ABSTRACT.** Spatial visualization serves as a key cartographic device for relaying representative information about that part of space portrayed, creating an ordered presentation of patterns that instruct the observer. This research explores the function of a mandala as a cognitive graphic of sacred space. The purpose of the comparison is to expand notions underlying assumptions of cartographic portrayal, space, and contestation affecting both cartography and religious geography. Opposing schools of thought in cartography dispute the role of maps as based on observable phenomena or maps as mental terrain. Exploration of the mandala as an instrument in Tibetan Buddhist ceremonies, as representative of sacred maps, illustrates its function in an expanded category of emancipatory and culturally contested space, broadening the power of cartographic depiction and contextualizing its creation.

Visualization is foremost an act of cognition, a human ability to develop mental representations that allow geographers to identify patterns and to create or impose order . . . Concrete visual representations . . . make spatial contexts . . . visible, so as to engage the most powerful human information-processing abilities, those associated with vision.

—MacEachren et al., 1992

Every map is a cultural construction that geographers, scientists, and artists alike create to make and convey meaning.

—Bender et al., 2004

### INTRODUCTION

Cartography is the historic center of geography's worlds. Maps serve as visualization devices that allow geographers to see relationships revealed as patterns in a spatial format. In his narration of the history of mapmaking, Wilford (1982, 13) declared, "the basic

significance of maps, then, seems to lie particularly in the fact that maps are surrogates of space." The usefulness of maps for transmitting concepts lies in their portrayal of spatial relatedness, which lies at the crux of cartography and human apprehension. In short, "anything that can be spatially conceived can be mapped" (Robinson and Petchenik 1976). Maps are "a complex visual text" (Bender et al. 2004, 1) that portrays what the mapmaker wants the viewer to see. By entering a map we enter the world of its creator(s), triggering an interaction with our own embedded, culturally contested view. The challenge lies in reflecting upon our understanding of spatially symbolic relationships as we try to perceive and evaluate the mapmaker's vision. The outcome potentially transforms our perception of the arrangement of the seen and unseen world and yields a clearer understanding of the importance of the mind as the seat of perception.

This research explores the spatial mapping function of visual representations in a mandala: a sacred space conceived as a cognitive graphic of an area that is seen as becoming real, is virtually inhabited, and entered into by the observer who then navigates through it on a mental pilgrimage. Exploration of geographic concepts from the perspective of a Buddhist mandala permits a fresh rethinking of core underlying assumptions and new notions of space, place, portrayal, and contestation in both cartography and religious geography. The latter geographic sub-discipline has shifted from a concern with the impact of religious practice on shaping the landscape, especially within Berkeleyan cultural geography, to a late twentieth-century interest in the use of space in portrayals of belief systems (Kong 1990). A particular interest of contemporary research involves symbols that seek to preserve cultural representations, from graves to special mountains and pilgrimage routes (Kong 2001). The role of mandala creation in heightening awareness of Buddhist, and specifically Tibetan, issues also will be explored in relation to another recent geographic concern with contested spaces. One of several groups of Tibetan refugee monks from monasteries in India created the specific mandala example pictured in this research. Their purpose includes preserving a culture that is endangered in their homeland, but which ironically is preserved in the south Asian country where Buddhism and the mandala form originated.

#### THE MANDALA

As portrayed in mandalas, cosmograms (depictions of the universe as an ordered and harmonious system) employ a spatial

Table 1.

## Mandala Types and Uses

Media	Outer	Inner	Secret
1) City plan	Concrete urban form	Ideal recreated on earth	Metaphysical mirror, bringing harmony through habitation
2) 3 dimensional sculpture, model	Art work	Inspirational, didactic	Used in "empowerment" lesson; navigated by instruction from guru
3) 2-3 dimensional on surface (e.g., sand)	Art work	Inspirational, didactic	Used in "empowerment" lesson; navigated by instruction from guru
4) Hanging thangka (painting, print, material)	Art work	Inspirational, didactic	Used in "empowerment" lesson; navigated by instruction from guru
5) Verbal instructions	Nirmanakaya (material depiction); guru narrates, observer outside aspirant	Sambogakaya (subtler representation); observer learning lessons inside, guru center guide	Dharmakaya (nondual, indivisible); Guru-observer-deity mentally merge entities in center

Source: Compiled by author.

visualization that falls into a different category from the currently contentious cartographic camps of positivists, realists, postmodernists, social theorists, and others. By directing visualization to the interior spaces of the observer's mind, this device contributes a non-Western perspective on the two-dimensional mapping of physical space with its portrayal of metaphysical, multidimensional experiential space. In his introduction to an edited volume on *Dimensions of Human Geography* (1978), Butzer proposed multidimensional categorizations of space for geographic research, focusing on space as a container of resources, control, social identification, and symbolic value. The mandala enlarges this framework by proposing an instructive space wherein, in this example, the individual can learn how to transcend earthly constraints and ordinary perceptions in order to realize his/her potential as a more enlightened being.

A mandala depicts and provides a way for humans to reach the center of the cosmogram by becoming a "mirror of the cosmos" (Brauen 1997, 21). The observer engages with the mandala on three levels of meaning generally classified as outer, inner, and secret (Table 1). One example sees the outer level as a divine form of the world, the inner level as a map through which the ordinary mind can be transformed by following it, and at the secret level as a balance of the clear light dimensions of the mind and subtle body energies. Creation of the mandala acts to purify all three levels,

with the central object of bringing about the acquisition of the associated virtues of wisdom, compassion and healing. To fully appreciate the nature of the mandala's use as a map the mandala must be understood as a physically existing entity (most commonly #3 and #4 in Table 1) that metaphorically represents a multidimensional space. This type of space can range from a tangible world portrayed in the common road map to a space visualized as a three-dimensional imaginary, to a purely metaphysical mind-training exercise. The practitioner peels back the layers of the external-physical-tangible along a guided navigated journey through the mandala toward realization of an internal harmonious integration. The mandala typically serves as a physical spatial metaphor that captures and contains a metaphysical space. This mapped metaphysical space includes a directional orientation of axially-oriented layers ranging from bottom to top and outer to central points.

The origin of the mandala has earthly roots in several continents. Cretan labyrinths of the fifth century BCE, like their Indian counterparts portraying cave mazes, included dead ends rather than a plotted path toward the center, where the Minotaur awaited its fate at the hands of Theseus (Zehnacker 2004). Maze maps were also associated with the winding pilgrimage route from Europe to Jerusalem, with the holy city placed in the map's center as targeted destination. In the Hindu tradition from which Buddhism sprung, yantras consist of diagrammatic objects composed to aid in meditation, and tend to be smaller than mandalas. *Yogin* is the Sanskrit name for a meditator who particularly seeks to join his/her individual mind in union with that of ultimate reality, represented by the protective deity which occasionally resided (metaphysically) in the middle of the yantra, similar to the mandala's function (Pott 1966). The American Museum of Natural History labels yantras unearthed at ancient historical building sites as devices used "to attract Divine Energy of a Deity into a sacred space" (Meister 2003, 258).

An archetypal yantra form features a large circle with the circumference touching, or close to, a surrounding square, and several square boxes or triangles inside the circle. Similar to mantras, following the yantra leads the meditator on a journey so that envisioning walking through them teaches various doctrinal lessons along the path. The yantra form could be constructed in buildings such as the Javanese Hindu temple in Barabudur, a four-sided structure whose stacked square tiers culminate in three concentric circles topped by a round peak in the middle (Eliade

1986). It is also seen in two-dimensional square platforms that include motifs such as a central deity surrounded by geometric figures, or an enclosure with a central T-shaped opening at the cardinal points, encircled by lotus blossoms (Brauen 1997). Yantras are visually projected in three-dimensional space as residences for a deity—another conceit employed in mandalas. Hindu mandalas, created to mark auspicious occasions such as birth and marriage, differ from Buddhist ones on doctrinal issues. The central values portrayed do not include distinctly Buddhist Mahayana virtues such as altruism (*bodhicitta*) and compassion. Yantras celebrating secular landmark events are produced and used by non-ordained individuals. Mandalas serve as a microcosmic configuration with more detailed spiritual symbols (Pott 1966).

Venturing into visual portrayals of places not on the face of the earth—of imaginative, internally-conjured realms that assert a greater validity than our concrete measurable perceptions—reclaims such spaces within the domain of geography and enlarges our geographic conceptual understanding of the function of visual portrayal of place (Harmon 2004). We sharpen our vision by seeing worlds other than those we are accustomed to viewing, and seeking to understand them as seen through the eyes of their creators. Travelers do this by going to other places on the earth, or viewing depictions of such places. Mandalas are distinctive features of religious art throughout the Hindu, Jain, and Buddhist world, which extends from Central Asia through India to China, Korea, Japan, and Southeast Asia. As symbols they embody a unique conception of crucial aspects of their ancient parental culture. This examination focuses principally on the Tibetan understanding, construction and use of mandalas, since it constitutes the most widely utilized contemporary form of traditional mandala as preserved since their introduction into Tibet as Indian iconic forms in the eleventh century. The next section journeys into a typical palace mandala, delineating the main features of this archetype as constructed by a contemporary group of traveling monks. The generalized interpretations in the next section are based on interviews with various monks—including several with the Buddhist equivalent of a doctoral degree—who have participated in mandala creations over two decades.

#### MANDALIC MYSTERY TOUR

The mandala trip consists of a mental journey through a sacred space constructed as an ideal environment for the pilgrimage

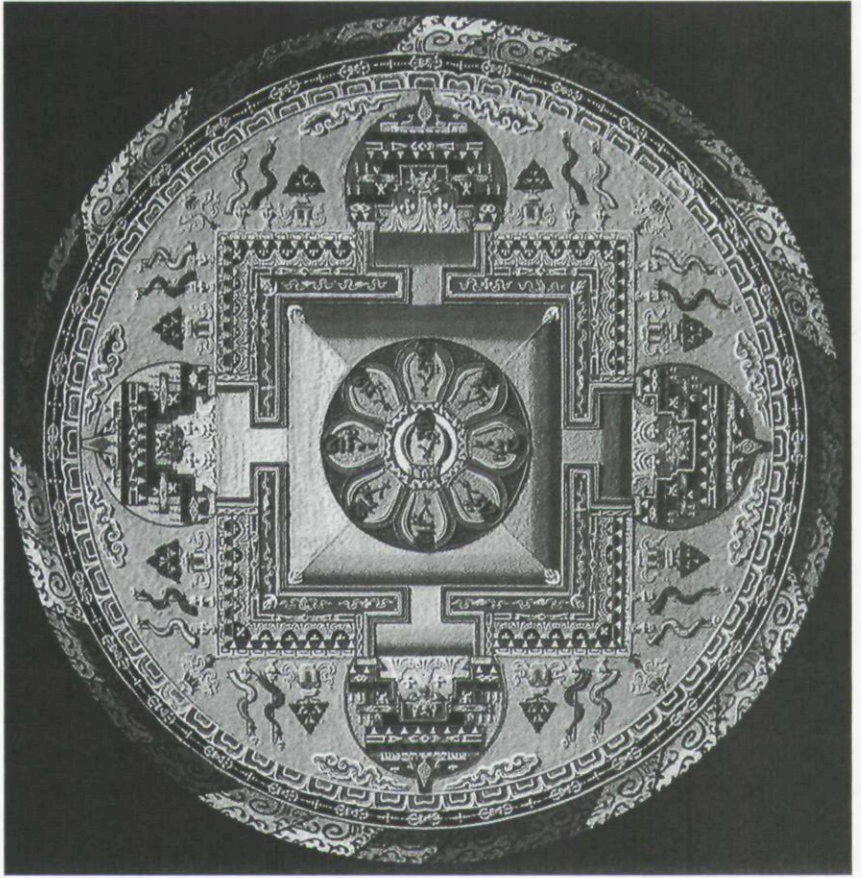


Fig. 1. Completed Mandala. Photo courtesy of Drepung Loseling Institute.

experience. Figure 1 portrays a standard palace-type mandala, representing the dwelling place of the deity symbolized in the center (Leidy 2000). Although mandalas vary in details such as the entities portrayed in the center circle and the symbols in the area immediately outside the outer square, this example contains several exemplary and key components that occur in high symbolic frequency. Various numerical sets are used to echo and contain other values that occur in the same number (three of this, four of that), although the underlying goal lies in attaining the realization that there are no separations, since all phenomena exist in "one taste." The three-dimensional imagined nature of the mandala is a key part of the visualization process, enhancing the map-like challenge of converting a multidimensional subject onto an essentially two-dimensional portrayal. The mandala's value as a symbolic roadmap lays in assisting observers to reach their goal of de-

veloping the attributes portrayed, for example, the three steps of wisdom (sun symbol), bodhicitta (bliss of compassion, moon symbol), and mind of renunciation (lotus symbol) by following the path indicated from outer rim to inner circle and learning the lessons contained within.

Three concentric rings, representing the three pillars to the state of enlightenment, form the border of the mandala example in Figure 1. The outermost burning "fire ring" band represents the wisdom of complete emptiness (seeing things as existing only in relation to each other, not independently). The next ring, festooned with *vajra* symbols of swords cutting the ropes of attachment binding beings to this worldly samsara state of suffering, forms the outer edge of, or fence around, a big tent overarching the complete interior of the mandala. The innermost mandala is thus set off and protected from all outside elements. The next ring of multicolored adjacent objects is composed of lotus petals, blossoming around and holding up the central objects above a triangular cone supporting the entire structure. Its three-sided structure also represents the three doors to liberation, the wisdom of emptiness in complete form, or the womb from which manifestations arise such as the lotus blossoms.

Four porticos, which should be envisioned as upright structures flanked by a pair of trees underneath a pair of stylized clouds, provide decorative entryways to the four gates. Four snakes (or *nagas*), winding caduceus-like up four poles within each quadrant, symbolically represent rainbow bridges between the outer rims and the next layer of square walls—uniting relatively earthly with heavenly realms (Wheatley 1971). The numerical utility of "four" evokes the "Four Mindfulnesses," "Four Noble Truths," and four aggregates (body, sensation, mind, object). The four gates in the middle of each walled framework represent the four cardinal directions. It is easy to visualize the palace as three-dimensional, since the perspective of gateways shows height proportionally smaller from outside to inside, with the central deity occupying the commanding heights. The five colors of the inner walls (white, gold, red, green and blue) around the T-shaped entrances echo the five aggregates, or wisdom energies, of the body. The elements depicted within the square frame and concentric inner circles are the seamless flip side of external reality, entered by crossing the depicted bridges through gates leading into the walled off sanctum.

The virtual pilgrimage consists in successfully navigating the mandala map. Instructions for how to do this are provided during

an "empowerment" ceremony, which can last for several hours. The teaching lama presiding over the ceremony functions as an experienced tour guide. He directs the step-by-step construction of the mandala elements in the mind of the participants, first ritually purifying the space underneath the tent within which the ceremony occurs, and metaphorically becoming the central deity whose virtues the participants aspire to acquire. The lama-teacher directs entry through the east gate, guides the ensuing circumambulation in clockwise fashion through the mandala, and awaits the arrival of the practitioner-pilgrim in the center. Ideally, special insight is achieved by the voyager either during the progress of the journey or upon arrival at the core.

The mandala—particularly the central representation which can take the form of a deity, symbol, or letter—is composed of all the elements the observer/practitioner must develop in order to achieve the enlightened state of the central deity who is the focus of the mandala (in this example, the wisdom mind). Practitioners advance by stages of gradually attained understanding. The mandala acts as a visual aid so travelers have a sense of what place they are entering and where they are within it. The observer's role lies in mentally putting him/herself in this place. In some advanced ceremonies the participant is blindfolded, then directed to visualize the various entities portrayed along the path within the mandala's palace. Eventually the blindfold is removed, and the practitioner is introduced to various deities visualized in different directions. The final central deity is the one the practitioner aspires to become, so the mandala exercise is an introduction to the initiate's hoped-for future dwelling place. When the lesson is understood, leading to insight into one's own true nature as a union of corporeal body and incorporeal clear light, all illusions disappear and the goal of purification is achieved.

#### SPATIAL VISUALIZATION AS A GEOGRAPHIC EXERCISE

Modern geography has considerably enlarged upon the traditional boundaries of what was considered mapping, and geographic visualization constitutes a particularly dynamic, interactive component of cartography (MacEachren 2003). Geographers now seek to express far more dimensions than those contained in the earliest maps portraying the size, shape, and distance between landforms. Standard cartographic representations variously portray space as a locus of resources, control, social identity, and symbolic value embodied in an external landscape. The inclusion of the mandala as a metaphoric map, aiding navigation



through multidimensional, metaphysical space, further enlarges the scope of geographic conceptions of spatial interaction.

Locating a place in space is a way of saying where something is in relation to something else. Geographic approaches to spatial representation are linked to core spatial concepts of location, region, distribution, spatial interaction and scale that constrain and shape representations of observations. All are discrete physical entities. Cognitive spatial representations function as mental models of geographic environments portraying what people think they know about an environment, and aiding understanding of how this image influences their behavior (NRC 1997). Buddhist philosophy considers space, earth, water, fire and air as constituting the fundamental Five Elements of conventional (as distinguished from absolute) reality (Zajonc 2004). Materialist Newtonian cartographers confine the realm of map-making to depictions of datasets. Neo-Kantian idealist (and Buddhist) depictions of spatial visualization extend the role of maps to "seeing the unseen" (Dorling and Fairbairn 1997, 102) in order to discover the unknown which is depictable, explorable, and ultimately available for solving problems and constructing new insights (Kraak 2003).

Use of the outer-inner, top-down, "God's eye view" of earth complements the detached, scientific perspective implicitly adopted for construction of many maps (Hallisey 2005). The three-dimensional computer-generated projection of a fly-through terrain useful for training pilots, plotting military applications, aiding topographic analysis, and video game entertainment, are also similar to a practitioner's experience of mentally envisioned, guru-guided mandala navigation. The interactive nature of mandala navigation, wherein the participant follows guided paths to encounter the lessons depicted and embodied in the imaginary three-dimensional palace-mazes, correspond to the navigational prowess of human-map interactions through queried terrain in cartographic depictions in a Geographic Information System (GIS) environment of simulated space based on material landscapes.

More concrete representations, as outlined in Table 1, consist of two-dimensional mandalas drawn on temple walls and flat hanging scrolls called *thangka*. They share the same subject matter and iconography as the three-dimensional mandalas, equally representing objects for visualization, navigation, and intellectually conjured spiritual co-habitation with a model deity. As internal pilgrimage sites, mandalas serve as maps for interior spiritual exploration through the guided imagination of the viewer. Empha-

sis is placed on "the relations, in an abstract sense, among the things symbolized" (Bryant 1993, 103), relying on the spatial abilities of the perceiver to interpret interrelationships between phenomena in several visual dimensions representing two or more data dimensions. The cosmogram's purpose lies in restoring a harmonious balance and "reconsecration [of] the earth and its inhabitants" (DLI 2004). Use of mandalas as healing devices, wherein the ill person enters the sacred precincts in order to be restored to their primal balance through the powers of the resident deity(ies)—can be found in some sense in such disparate communities as the Assyrians and Navajos as well as Tibetans (Allen 1998).

Earthly as well as imagined residential communities constructed along the lines of a sacred schematic have ancient roots in Asia. Wheatley's classic *The Pivot of the Four Quarters* (1971) examined the micro-cosmological significance of the traditional Chinese city which was designed to approximate on earth the layout of a deity's residence and surroundings. Components of the cosmologically appropriate abode shared by both the ideal Chinese city and the mandala palace include "cardinal orientation, cardinal axiality, and a . . . square perimeter delimited by a massive wall" (Wheatley 1971, 423). Wheatley's work cites abundant examples of temple cities throughout Asia (including South Asian India and Southeast Asian Cambodia) that conscientiously sought to follow a "sacred cosmography" (Wheatley 1971, 436). The urban designer's goal lay in creating a peaceful harmonization of the human and ideal spirit world by building a concrete version of the deities' dwelling. The central *axis mundi*, a round pivot at the center, represented the earthly Mt. Meru, dwelling place of the spirit world.

The earliest Tibetan monastery of Samye, and Lhasa's central Jokhang Temple, were constructed architecturally on the same cosmological principles, invoking design correspondence between the two worlds of the concrete observed by the contemporary eye and the ideal invoked mentally. The central plan involving four major and eight minor continents revolves around Mt. Meru in the middle, following the tantric Mahayana tradition of Tibet (Martin 2005). The central area also contains a statue of Buddha and a throne for the Dalai Lama. From this area walls spiral out to direct the pilgrim's circumambulation path. Instructive paintings and decorative painted murals occur along the way for the passer-by's edification. Four doors eventually permit exit in each of the four cardinal directions. The following sections further explore the

function of mandalas as mapping two and three-dimensional representations of exalted spaces in a spiritual world.

#### MANDALA AS COSMOGRAM

The cosmogrammatic mandala represents transitorily inhabited, constructed space. The earliest use of the term "mandala" referred to verses in the sacred Hindu *Vedic* scriptures (the "Atharva-Veda," early in the first millennium BC) that linked depictions of dwelling places of holy beings, cosmograms, and the human body. In the sixth century AD the "Vastupurusamandlas" evoked a plan for cities and buildings similar to that of Wheatley's archetypal *Pivot of Four Quarters*, with ritual altars as a possible precedent, utilizing the construction device of apportioning space as in a metaphysical temple (Meister 2003). Mandalas as sacred spaces could also apply to caves or other real world locations believed to be inhabited by the holy. Circles were drawn as places for teachers to sit within and transmit their teachings. The precincts of Bodhgaya's bodhi tree, under which the historic prince Siddhartha Gautama chose to meditate when he experienced his enlightenment, was already considered one such special place. By Buddha's time (563–483 BCE), mandalas were freed from actual place fixity in order to depict ideal dwellings wherein mobile practitioners and spirits could metaphysically cohabitate.

Mandala construction in the Buddhist system usually takes place as part of a religious ceremony where associated spatial visualization occurs. Only practitioners who receive permission from their teachers as having attained the required basic understandings are permitted to attend, so they can understand the imparted insights on the three levels: outer meaning available to all, inner meaning for those with more learning, and secret meaning for initiates only. Public constructions of mandalas are seen as bestowing benefits upon observers, at whatever level they are able to understand the process and message of the cosmogram. The purpose of ritual arts such as mandala construction is to invoke the deity pictured in the center of the mandala. The observer, who aspires to become like this sacred model, is guided through the mandala labyrinth by a guru (a monk who is in the primary teaching role) who representationally takes on aspects of the deity portrayed. The object is to awaken and enhance the participant's own Buddha nature through a reading of the "visual scripture" that is the mandala (Bryant 1993, 20). The practice of constructing a mandala comes from the Himalayan tantric concept of sacred



Fig. 2. Constructing Mandala. Photo by author.

ground where prepared visitors can experience heightened awareness and take significant strides in their understanding of the world outside and their inner nature (Bryant 1993; Zangpo 2001). Mandalas are representations. The real mandala relates to aspects of the mind, providing a metaphor to help transcend the perspective of ordinarily perceived existence.

The particularly Tibetan tantric mandala is often constructed on a raised platform such as a table (Fig. 2), representing the place where Siddhartha Gautama sat when he attained enlightenment and became Buddha, "the awakened one," in a marked off, sacred precinct at the base of a bodhi tree (Ten Grotenhuis 1999). Raised within the Hindu tradition, Prince Siddhartha well understood the sacredness of special places that occur throughout India and constitute pilgrimage sites through the present day (Bhardwaj 1970). Both the piled sand mandala and the flat *thangka* should be mentally visualized as three-dimensional entities, fully realized from the two-dimensional representations. The top-down view from above the table or straight-on view of a scroll is an irrelevant perspective issue in this case. Before drawing a mandala, the participating monks request permission to use the surroundings from the deity who will be invoked as the central image. The space to be utilized in the ceremony is then ritually dissolved into emptiness, from which a new space arises that can sustain sacredness.

The ensuing process of re-occupying the sacral space illustrates “the cultural labor of ritual, in specific historical situations, involving the hard work of attention, memory, design, construction, and control of place” (Smith 1978, 88).

Symbolic patterns traced with colored sand (*dul-tson-kyil-khor*, or “colored powders center circles”) constitute the most common form of the mandala. Mandalas can be two-dimensional and constructed of rice, flower, stone, jewels, or sand, or three-dimensional and made from materials such as wood or metal. The type of material used in the construction relates only to issues of cost and convenience, rather than symbolism. Borders setting off elements can be either slightly raised areas of heaped material or fully constructed elevations. The graphics used in the central and surrounding areas can be anthropomorphic representations of deities, sacred symbols, or special letters with sacred meaning associated with the deity and its virtues such as the blue Akshobhya manifestation of Buddha represented by the seed syllable for peace in Figure 2. The monks envision a transcendent place suitable for occupation by deities as they draw the mandala, which also makes both the space and the act continuously sacred. Dances and/or prayers employed before the construction begins and again near the end immediately prior to invoking the presence of the deity portrayed also act to dispel negative obstructions. At a special point near the end of the mandala ceremony, both the deity it is designed for and the human observer are invited by the presiding guru-guide to mentally inhabit the constructed environment (Fig. 3).

#### CONCLUSION: ANALYTICAL INTERFACES

Ontological notions concerning the nature of reality inevitably (if not always consciously acknowledged) spill over into cartographic depictions. Geographic approaches to cartography largely fall into two camps: the Newtonian-Cartesian materialist approach which asserts that mapping records the physical world, plotted mathematically to scale, or the Neo-Kantian view that all reality is a projection of the mind, and cartography is simply a recording of mental perception (Hallisey 2005). Although both would agree that maps are representations that convey the creator’s perceptions, they differ in their assessment of the fundamental reality of what is portrayed. The Buddhist “Middle Way” (*Madhyamika*) view takes a third position between empiricist and nihilist propositions, contending that the world exists both physically/conventionally and in a non-material/ultimate sense. Mandalas are maps that exist in the material world



Fig. 3. Consecrating Mandala. Photo by David Hilburn.

but depict an “imaginal world-patterning directly affecting inner structuring of physical and mental senses through . . . a world-picture reflecting the brain’s perception of its environment” (Thurman 2000, 143) that becomes imbued with a sacred presence. As the goal of Newtonian cartography is to depict an accurate representation of the observable material world, the mandala maker seeks to chart the nature of an “ultimate” world, utilizing a “cosmogrammar . . . of cultural representations” (Thurman 2000, 144).

Geographers such as Harley (1989) assert the underlying subjective, cultural-centric and hierarchic nature of maps. Mandalas, with their centrally-placed deity, certainly fit this category of spatial visualization. Research insights of Mark (1999) and Lakoff (1987) lead to observations of an inherent spatial sense in the human mind that finds expression in representation, using conventions to describe things. Mark asserts that an “ontology of geographic space” involves both physically apparent “entities” and their representative “objects,” whether in the digital world of GIS,

mathematics or art. Regardless of cultural contexts, the function and importance of objects have a similar order in terms of hierarchy, proximity, size, distance, direction and placement within reference frames. Mark concluded that maps are inextricably connected to mental perceptions, which in this research corresponds to Buddhist depictions within mandala representational schemes.

For pioneer psychoanalyst Carl Jung the mandala served as an example of creative expression reflecting a "collective unconscious" laden with symbols of human experience that the mind drew upon to decipher understanding (Masquelier 2004). Jung created personally designed mandalas to order his troubled psyche, enabling him to interpret the pattern of symbols generated. Such personal interpretations, unrelated to larger belief systems, serve principally to indicate the usefulness of mapping mental perceptions within a Mandalic organizational scheme (Tucci 1961). Cartographic devices likewise attempt to draw on nonverbal, shared understandings of symbolic meanings for the power of their shorthand representations, sometimes assisted explicitly in a "legend."

Sacred space is often an outcome of contestation (Kong 2001). Although mandala making by specially trained monks occurs as part of traditional ritual practices in Buddhist temples, creating mandalas in Western public venues inserts a space for cultural recreation, a key point in the Sino-Tibetan contestation over the physical space of Tibet. Mandalas are produced in secular spaces (e.g., museums or schools) in the West by monks dispossessed from their Himalayan homeland as a consequence of China's 1959 invasion of Tibet, the source location of Tantric Buddhism. China's subsequent occupation and annexation of this territory, and suppression of Buddhist practices, led to the movement for preservation of Tibetan cultural elements in monasteries established by immigrants throughout India, an overwhelmingly Hindu and Moslem nation that was the birthplace of Buddhism. The territorial and cultural dispute is projected by building mandalas as an education and blessing for their beholders, and to place Tibet back on the mental map of global consciousness. This type of sacred space is indeed entangled in "new geographies of religion as politics and poetics in modernity," of "social, economic and political conditions [which] cannot be studied separately from the communities that constructed it, challenged it, destroyed it, and provided new formulations of it over time . . ." (Kong 2001, 215). The mandala is a "text produced in circuits of culture," deeply embroicated in both an ancient community and contemporary conflict.

Spatial visualization plays a powerful part in the cartographic construction of a mandala. The representational devices of tiered squares within a circular dome, topped by a deity-dwelling inner sanctum, which the observer reaches by navigating the inner courtyards and corridors, clearly serve as mapped meanings that convey culture-laden messages. Patterned relationships play out within a physical as well as metaphysical spatial format. The emancipatory nature of this sacred map lies in the premise that the traveler can become enlightened, attaining the insights of the guru and the deity whose virtues are portrayed, by learning the lessons conveyed along the way. As a primary meditation device, the mandala serves as a map for three-dimensional buildings, two-dimensional art hangings and sand paintings, and interior mental visions. It is a patterning of space that imposes structured order to convey cultural meanings, partially inherited from Hindu and Jain predecessors in the Indian Buddhist hearth.

Mandalas function as moral and mental maps, expanding the participant's vision of interior space and adding a new dimension to non-Buddhist notions of cartographic imagery as well as cultural geography. Geographers and visionaries in other disciplines utilize spatial visualization and map metaphors as communication media for their imaginings of reality, as well as for analysis of relationship patterns. Whether the ultimate nature of reality consists of bits of information rather than energy (Sui 2004), or underlying and ongoing consciousness that shapes and is shaped by other forces in the Buddhist worldview, mapmakers construct bridges for the expression of such varied ideas. The purpose of the forgoing discussion lies in continuing to open up notions of space, fluidity, powers of depiction, and an expansive commonality in the human endeavor to communicate complex insights about the nature of reality within multidimensional spatial representations.

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