7-2023

Mahāyāna Mind-bending: Buddhist Visions of Outer/Inner Worlds

James Shields
Bucknell University, jms089@bucknell.edu

RELIGION AND OUTER SPACE

Edited by Eric Michael Mazur and Sarah McFarland Taylor

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

3

MAHĀYĀNA MIND-BENDING

Buddhist Visions of Outer/Inner Worlds

James Mark Shields

Introduction

Like all the major religious traditions of the world, the collection of Asian teachings, practices, and ritual behaviors known collectively since the 19th century as "Buddhism" is linked to a set of beliefs regarding the cosmos, some, if not most, of which predate the earliest forms of the tradition that emerged in the Himalayan foothills roughly 2500 years ago. Even more than other religious traditions, however, Buddhism tends to complicate—and at times radically conflate—the external and internal, such that the "cosmos" was sometimes understood to be a representation or holographic manifestation of mental and affective processes—a map of consciousness, as it were, or even a path to liberation. While it would be anachronistic to speak about a Buddhist concept of "outer space," Buddhist cosmologies, in both classical and Mahāyāna forms, point toward the possibility of "other worlds" (spatially, not simply temporally), which can be reached by advanced meditators as well as those who have achieved the status of bodhisattva or buddha. Moreover, in describing these "buddha lands," the authors of such texts also speculated on the nature of space and time and posited various ways in which awakened beings might manipulate and even transcend these categories. In this chapter, I first outline the most influential cosmologies and cosmogonies associated with a few of the major Buddhist traditions, before examining these through conceptual and theoretical lenses associated with the genres of *utopia* and *speculative fiction*. Ultimately, I make the case that certain significant Buddhist texts might be best read as examples of *speculative fiction*.

DOI: 10.4324/9781003088264-5

Other-Worldly?

Before turning to the first of these cosmological visions, I feel compelled to address some of the ambiguities involved in speaking of Buddhist "other worlds"—and "otherworldliness." In the modern Western and oftentimes Asian imagination, Buddhism generally—and Zen more specifically—is often understood as being *disengaged*, promoting a form of awakening that is not only, as the classical Zen phrase has it, "beyond words and letters," but also ultimately "supramundane" in focus and affects. Of course, this assumption is challenged if not entirely belied by the contemporary movement known as Socially Engaged Buddhism, which posits an understanding of Dharma (i.e., Buddhist law or teachings) that is explicitly "worldly" in form and thrust (see, e.g., Queen and King 1996; Kraft 1999; King 2009). Moreover, decades prior to the work of south Asian reformers such as B. R. Ambedkar (1891–1956) and Thich Nhat Hanh (1926–2022), East Asian Buddhists such as the New Buddhists of Japan and China's Taixu (1890–1947) were making a similar case for a "this-worldly" Buddhism (the New Buddhists insisted that "modern" Buddhism required a cosmological foundation in "pantheism" [Jp. *hanshinron*]; see Shields 2017a, chapter 3). That said, these modern and contemporary Buddhist activists were cognizant of the fact that most traditional—institutional—forms of Asian Buddhism were focused on cultivating cognitive and affective qualities in the individual that would lead him or her (mostly him) to states of being that transcended the affairs of "this world" in some fashion. New and Engaged Buddhists might dismiss traditional Buddhism as being, among other faults, overly superstitious, but it is important to point out that the achievement of "supramundane" states does not in itself assume a cosmology (let alone cosmogony: *how*, and *why*, the cosmos came into being) of "other worlds."

In short, premodern forms of Asian Buddhism *did* maintain that true human flourishing involved a "transcendence" of ordinary states of being—i.e., in *nirvāṇa* as the ultimate goal, at least of the monastic if not lay practitioner. In addition, this "transcendence" of ordinary existence was associated with various "supramundane powers"—particularly at the level of buddhas and bodhisattvas (i.e., "buddhas to be"). And yet, this was often combined with an insistence on a singular reality or cosmos so that the transformation involved in awakening *could* be read as a matter of purely internal dynamics, i.e., the "other world" (or, to use the language of the tradition, "other shore") as nothing more than "this world" correctly understood and experienced.

Suffering and Skillful Means

Before going further, a few words about "Buddhism," a term fraught with definitional ambiguities. First and foremost, there is not, and has never been, a single thing—whether we want to call it a "religion," "philosophy," "ritual tradition,"

or "institution"—called Buddhism.[1] Even setting aside the fact that "Buddhism" is a Western term of relatively recent coinage,[2] significant cultural, linguistic, and sectarian variations among those who have followed some version of the Dharma render it foolhardy to suggest an "essence." At any rate, many of the classical texts push strongly *against* the search for "essence" (Sk. *svabhāva*) to anything.

I see this definitional fluidity less as a limiting factor than as an opportunity, though one we must approach with the cautionary tales of a century or more of Western orientalism (both negative and more recently, partly due to the work of popularizers such as D. T. Suzuki [1870–1966] and Alan Watts [1915–1973], romantic and idealizing). At any rate, while there can be no single definition of a set of rituals, practices, values, and ideas as diverse as those which are labeled "Buddhist," I hold it uncontroversial to claim that, whatever else may be involved, the various Dharmic traditions provide *methods for the amelioration if not elimination of "suffering" (Sk. duḥkha) among sentient beings*.[3] Without this, I suggest, whatever is being discussed cannot make a reasonable claim to being "Buddhist." And yet, early on within the Dharmic tradition, we see the emergence of a doctrine or method that would allow for significant flexibility as to how the "end" of eliminating or ameliorating suffering was to be achieved—*upāya kauśalya*, i.e., "skillful" or "expedient means."[4]

Suffice it to say that in its earliest usages, *upāya* implied that the Buddha, and by implication any *buddha* or fully awakened being, would suit his instruction to the capabilities of his particular audience. In short, it was a pedagogical technique, one that both attested to the wisdom of the Buddha as the Supreme Teacher, while also helping to account for the diversity within and among early Buddhist texts. Later on, as the Mahāyāna streams of Buddhism began to emerge in India and West Asia and find a home in Tibetan and East Asian Buddhist traditions, *upāya* became even more significant. In early Mahāyāna texts such as the *Lotus Sutra*, "skillful means" appears to be the central teaching of buddhas and bodhisattvas—and thus the foundation of Dharma itself.[5] When we apply this centralization of "whatever works" to Buddhist cosmology, several things happen. On the one hand, traditional or rival cosmologies may be "bracketed" as *lesser* means toward the end of ameliorating suffering—akin to what Plato in the *Republic* called a "noble lie." At the same time, it also opens up the floodgates to even more speculative and elaborate cosmologies, since these may be more "suited" to particular—in Mahāyāna terms, this generally meant more "advanced"—audiences. Indeed, texts such as the *Heart Sutra* polemically undercut traditional ("Hinayana") Buddhist teachings of all sorts, boldly asserting their nullity or "emptiness," even while foregrounding increasingly elaborate visions of "other worlds" intersecting with our own.

Classical Cosmologies

Let us return, however, to the classical texts, in search of early Buddhist pictures of this and other worlds. Most scholars concur that the earliest and most influential

Buddhist cosmology, the six-world system, contains pre-Buddhist, pan-Indian elements, including a widespread belief in *karma* and rebirth. In classical Buddhist cosmology, temporality and spatiality are deeply interfused—though we will consider Buddhist *cosmogony* separately below. That said, there is little cosmology to be found in the early Pali *suttas* that purport to record the teachings of the historical Buddha. The Buddha makes oblique references to the overwhelming age of the universe and the general expanse of time, as perceived by buddhas, as well as the ability of awakened beings to traverse various planes of existence—"the three thousandfold and the great thousandfold world system"[6]—should they choose. While this might be dismissed as a purely rhetorical move, one among the many that emphasize the extraordinary powers associated with full awakening,[7] it presages a cosmology that allows for the existence not only of various planes of consciousness but also of many (buddha) worlds, which may occasionally interconnect but can also exist independently. It is worth noting here that while ancient Indian cosmogonies exaggerate the scope of temporality—the classical Hindu *kalpa*s or progressive world cycles were generally considered to last billions of years, if not longer[8]—the Buddhist understanding foregrounds a sense of multidimensionality, or what we could call today parallel universes or the "multiverse."

Six Realms of Desire and Rebirth

As noted, early Buddhist cosmology is rooted in what is sometimes called the "six world system," according to which the Earth itself contains six "realms" inhabited by different beings at various levels of awakening (and thereby experiencing different levels and types of suffering).[9] These six realms are the abodes of: (1) hell beings; (2) animals; (3) *preta*s or "hungry ghosts"; (4) humans; (5) *asura*s or "wrathful spirits"; and (6) *deva*s, i.e., heavenly beings or gods.[10] While this might sound like Dante's formulation of the late medieval Christian cosmos—trifurcated into Inferno, Purgatory, and Paradise, each with its own levels—in the classical Buddhist understanding, these six worlds all exist in the same place and time, and a being can, in theory at least, move between them via the continuing cycle of rebirth (directed by *karma*). As noted above, it is not entirely clear whether these (or other "worlds") are intended to be taken seriously as "real" places, as opposed to metaphorical, symbolic, or "mental" states; however, it seems likely that, whatever the Buddha or later monks and scholars might have intended, most regular Buddhists likely believed them to be so.[11] Of these six realms, the "highest" realm of the gods or *deva*s functions to some degree as the Western Christian and Islamic concepts of Heaven or Paradise, with the important distinction that, while rebirth in the *deva-gati* is full of bliss, it will *not* lead one to the final goal of Buddhist practice—i.e., *nirvāṇa*, complete liberation from suffering (and thus, rebirth)—since all this ease and pleasure leads to further attachment and suffering. That said, as many scholars have noted, for the vast majority of lay (i.e., non-monastic) Buddhists rebirth in this realm *is* in fact the conscious goal of their practice. By

the same token, the lowest of the six realms, the abode of "hell beings," functions as an equivalent to the Islamic and Christian hell, where beings are punished in various (and often extremely creative!) ways for their "sins." While one can, at least in theory, "escape" these hells, the Buddhist practitioner wants to avoid them at all costs. Finally, above and literally "beyond" the six realms that govern rebirth (and are thus associated with the "wheel of *samsara*") are the various realms that a Buddhist practitioner can reach via meditative concentration. These are much less "spatial" in description and more clearly relate to levels of consciousness—though again, one cannot make a hard and fast distinction between "real"/external and "symbolic"/internal.

The Fall: *Aganna Sutta*

A distinctive but highly instructive alternative cosmological vision is found in the *Agañña Sutta* (AS) of the Pali Canon.[12] While the bulk of the AS is concerned with the questions of caste and morality,[13] in the second part of the text, the Buddha explains these matters by way of a discourse on the origins of the Earth and human social development—two topics that are not often found in ancient Buddhist writings. According to the AS cosmogony, the universe goes through long cycles of expansion and contraction. In the early stages of this process, as the cosmos expands but before the emergence of land or light of any sort (as Genesis might have it: when all was "wild and waste"), a number of ethereal beings are born in the world: "mind-made, feeding on delight, self-luminous, moving through the air, glorious." To make a somewhat long story short, a transformation begins to occur by which the Earth is converted with a thin, sweet film, which some of the "creatures of light" promptly begin to ingest. Thus begins a long but steady "Fall" into greed and rapaciousness, which brings about not only corporal bodies but the sun and moon and night and day—and by extension, temporality itself, or at least the possibility of change and decease. Over a long period of progressive "materialization," social distinctions begin to appear, including gender, caste, and class differences.[14] As always, it is hard to know how to interpret the AS origin story as a statement by the Buddha about what "really" occurred in this historical past. Some or all of this may have simply been to get across a point about the socio-religious issues raised by the Buddha's interlocutors. And yet the "speculative fiction" of the origin of life on our planet emerging *sui generis* from luminous, highly intelligent, disembodied beings presents a powerful cosmogenetic image and one that clearly verges into what we would now call "sci fi" territory.

Mahāyāna Mind-Bending I: *Lotus Sutra*

Sometime around the 1st century CE, a division began to arise in some Buddhist communities in India. While the precise origins remain vague, the emerging movement known as the Mahāyāna or "Great(er) Vehicle" would come to

have a tremendous impact on virtually all later forms of Buddhism in Tibet and East Asia.[15] Though the Mahāyāna seems to have arisen due to competing interpretations of monastic discipline, several important doctrinal innovations would eventually emerge via foundational Mahāyāna texts such as the *Lotus*, *Avataṃsaka* (Flower Garland), and *Sukhāvatī* (Pure Land) sutras. Here, I will examine these texts with respect to the significance of their cosmological or "other-worldly" aspects.

The *Sutra on the White Lotus of the Sublime Dharma* (Sk. *Saddharmapuṇḍarīka-sūtra*), commonly known as the *Lotus Sutra*, is arguably the most influential sutra of Mahāyāna Buddhism and certainly one of the most revered sacred texts in East Asia.[16] The *Lotus Sutra* is a devotional text rather than a philosophical one; i.e., it seems intended to work on the level of the emotions and the senses rather than the intellect. Within its spectacular scenes and various parables, the *Lotus Sutra* presents the following core ideas of Mahāyāna Buddhism: (1) the doctrine of *upāya* (Jp. *hōben*), or "skillful means," as the way in which Buddhas and advanced bodhisattvas teach the Dharma to less advanced beings; (2) perfect awakening or Buddhahood as a realizable goal for all beings; (3) the way of the bodhisattva and the practice of compassion as the highest goal of Buddhism; and (4) the eternal and transcendent character of the Buddha. Though less immediately apparent, other significant Mahāyāna doctrines such as emptiness (Sk. *śūnyāta*), Buddha-nature (Sk. *tathāgata-garbha*), and the three bodies of Buddha (Sk. *trikāya*) have also been read into the text by later exegetes.

Contemporary scholars divide the text of the Lotus Sutra into several parts, with chapters 10–22 (along with the introductory chapter but excluding chapter 12) representing a later group of writings. These chapters focus on the transcendent powers of the Buddha (and of buddhas more generally), one of the most significant innovations in Mahāyāna thought. This is vividly expressed in the sixteenth chapter, "The Lifetime of the Tathāgata." The chapter follows a scene in which the bodhisattva Maitreya shows confusion as to how the Buddha (Śākyamuni) could have possibly converted innumerable bodhisattvas, as he claims to have done, in the short span (roughly 40 years) since his initial awakening under the bodhi tree. Here Śākyamuni answers Maitreya's question, in the process effectively reinterpreting the concept of Buddhahood by way of the doctrine of skillful means. We are informed that the Buddha in fact achieved awakening many aeons in the past and has spent an inconceivably long time since leading other beings to full awakening or *nirvāṇa*. Thus, the biography of the "historical" Buddha—including his birth, renunciation of wealth and family, awakening, and "final" *nirvāṇa*—is revealed as expedient means employed by the (virtually) eternal and transcendent, fully awakened Buddha to most effectively teach the Buddhist teachings or Dharma.

Beyond the reiteration of the importance of skillful means, one implication of this chapter is that the Buddha remains "in the world" out of boundless compassion for the suffering of living beings, but also that he does so as an extraordinarily

powerful being, one who is able to control space and time at will. Here, the early Buddhist understanding of *nirvāṇa* as "extinction" (i.e., of suffering and rebirth) is overturned—a move that would have significant implications for East Asian Buddhist doctrine and practice. This teaching of the "primordial" or "eternal buddha" would find more elaborate expression in the Chinese interpolation of the so-called three bodies of buddha, in the doctrinal formulations of Tiantai sect founder Zhiyi (538–597), and in the development of original enlightenment (Jp. *hongaku*) thought in Japan, which suggests that not only buddhas but all living beings and even non-sentient things are always already awakened. By granting not only "sentience"—understood as the capacity for suffering—but also *fully awakened consciousness* to all forms of matter, our conventional assumptions about life, death, space, and time are put into question, invoking confusion and curiosity, but also, one assumes, a certain measure of awe and humility.

Mahāyāna Mind-Bending II: *Avataṃsaka* (Flower Garland) *Sutra*

Though arguably less influential than the *Lotus Sutra*, the *Avataṃsaka* or Flower Garland sutra, composed just a few centuries later, doubles down, as it were, on the mind-bending aspects of an awakened Mahāyāna Buddhist consciousness and may be the single most "sci fi" of all premodern Buddhist texts.[17] In particular, whereas the *Lotus Sutra* centralizes the doctrine of "expedient means," the (much longer) *Avataṃsaka Sutra* highlights the concept of *interdependence*, a Mahayana radicalization of early Buddhist doctrines such as dependent co-origination no-self. Whereas early Buddhist texts point out that a) all forms arise from various causes and conditions and b) human beings, in particular, lack a single, stable "essence" or *ātman*, in the Mahāyāna this is extended to all entities (Sk. *dharma*s), which are now considered to be completely "empty" of self-being. Furthermore, all entities not only arise from causes and conditions, but also mutually interpenetrate one another in a complex matrix that thwarts our ordinary conceptions of space and time. In the *Avataṃsaka Sutra*, "awakening" becomes, quite literally, a "mind trip"—a Buddhist pilgrim's progress described by one scholar as "fractal," "holographic," and "psychedelic" (Fox 2015). In the context of East Asian Buddhism, the sutra is generally understood as providing a glimpse of the so-called Dharmadhatu or the world as seen by a fully awakened buddha; i.e., as a vast, interpenetrating web of phenomena, in which even the smallest of particles (the text says "dust," but we might say atom or quark) contains an infinite regress of fields full of "beings" and "assemblies." As in the contemporary *Matrix* films, this insight into the emptiness/interpenetration of all things comes with the power to control space and time:[18] "Having realized that this world is like a dream, and that all Buddhas are mere reflections, that all principles are like an echo, you move unimpeded in the world" (Gómez 1967, 81).[19]

In terms of classical Buddhist doctrine, of course, the infinite knowledge and power of awakened beings are primarily there to provide comfort and "salvation"

to the vast legions of suffering sentient beings over space and time, a point reiterated by the great bodhisattva Samantabhadra at the very end of the *Avataṃsaka Sutra*. And yet, as in other Mahāyāna texts, the reader gets the distinct impression that the author or authors are enjoying engaging in speculation about cosmic wormholes and portals to other dimensions. Here is a passage from Book 4: The Formation of the Worlds:

> The exceedingly profound ocean of virtues of wisdom
> Appears in innumerable lands throughout the ten directions,
> Its light shining everywhere, turning the wheel of the teaching
> In accord with what the various sentient beings need to see.
>
> The ocean of lands of the ten directions is inconceivable;
> Buddha has purified them all, over immeasurable eons;
> In order to edify beings and cause them to mature
> He appears in all lands.
> …
> Sentient beings are infinite
> Yet Buddha guards them all in his thoughts;
> Teaching the truth, reaching all:
> The power of Vairocana's realm.
>
> All lands are in my body
> And so are the Buddhas living there;
> Watch my pores,
> And I will show you the Buddha's realm.
>
> (Cleary 1987, 183–184)[20]

Ultimately, according to the *Avataṃsaka Sutra*, there is one "cosmic" Buddha—known as Vairocana or Great Radiance—whose very "body" pervades the universe, such that the infinite worlds of space and time, including all other buddhas and sentient beings, are somehow contained within him. Any being (e.g., the "historical" Buddha) who achieves the highest level of awareness in that moment "becomes" or "realizes" Vairocana. Again, we see a reiteration of the idea that a) multiple worlds and dimensions are real; b) these can be accessed, but only by those who have gone through a lengthy training series as bodhisattvas and (ultimately) buddhas; and c) one who achieves this state cannot only "see" these other worlds and dimensions but can access and manipulate them at will. The following passage, also from Book 4, reveals the powers available to "enlightening beings":

> Enlightening beings can cultivate the universally good practice,
> Traveling paths as numerous as atomic particles in the cosmos,
> In each atom revealing countless lands
> Pure and vast as space.

> They manifest mystic powers equal in extent to space
> And go to enlightenment sites where the Buddhas are;
> Upon their lotus seats they reveal many forms,
> In each and every body containing all lands.
>
> In a single instant they reveal past, present, and future,
> Where all oceans of lands are formed.
>
> (Cleary 1987, 186)[21]

The most interesting and, scholars assert, oldest section of the *Avataṃsaka Sutra* comes in Book 39 (Entry into the Realm of Reality), where we read of the Buddhist layman Sudhana (Excellent Riches) journey to various lands, both worldly and other-worldly, in his personal quest for awakening.[22] More Bunyan than Dante, but with a decidedly Mahāyāna sci-fi overlay, we follow Sudhana as he embarks on his quest, meeting an eclectic series of 53 teachers along the way, including 20 women—one of whom, Vasumitra, also happens to be a sex worker who informs the eager young acolyte that sexual intercourse can itself be a means to awakening![23] Sudhana's quest reaches a climax with his final three instructors—three of the most accomplished bodhisattvas, Maitreya, Mañjuśrī, and Samantabhadra—who usher him into a realm of vastly expanded consciousness.

> Then Sudhana, seeing the miraculous manifestation of the inconceivable realm of the great tower containing the adornments of Vairocana, was flooded with joy and bliss; his mind was cleared of all conceptions and freed from all obstructions. … With physical tranquility, seeing all objects without hindrance, by the power of production everywhere he bowed in all directions with his whole body. The moment he bowed, by the power of Maitreya, Sudhana perceived himself in all those towers … Sudhana, by the power of the enlightening being … his intellect having entered into the inconceivable wisdom of enlightening beings, saw the whole supernal manifestation, was perfectly aware of it, understood it, contemplated it, used it as a means, beheld it, and saw himself there.
>
> *(Cleary 1987, 1490 and 1497)*[24]

Mahāyāna Mind-Bending III: *Sukhāvati* (Pure Land) *Sutras*

Last but by no means least, let us turn briefly to several Mahāyāna texts known collectively as the Sukhāvati or "Pure Land" sutras, which provide a different take on "other worlds" from either the *Lotus* or *Avataṃsaka*.[25] These texts, probably composed in West Asia (Kusha/Gandhāra) in the 2nd and 3rd centuries CE, posit a "pure land of bliss" that can be reached by devotees of a powerful, supremely merciful buddha called Amitayus or Amitābha ("Infinite Life" or "Infinite Light").[26] As the Mahāyāna began to penetrate China in the 3rd and 4th centuries, the Pure Land sutras and associated schools emerged as some of the

most popular. Later, this would happen again in Japan, where to this day Pure Land Buddhism is the form with the largest number of adherents.

The Longer Pure Land sutra begins with the Buddha Śākyamuni (aka the "historical" Buddha) telling his disciple Ānanda that in a past existence he was a king who renounced all worldly goods and pleasures to become a bodhisattva ("The *Larger Sutra*," section 5). Soon after embarking on this path, the bodhisattva (now called Dharmākara or Dharma storehouse) is granted a cosmic vision of an infinite expanse of "buddha lands" extending in all directions, upon which he spends "five aeons" or *kalpa*s coursing in deep meditation, during which he gains immense merit (and power), enabling him to create Sukhāvati, a "land of bliss" for any and all sentient beings who call on his name ("The *Larger Sutra*," sections 6–9). The sutra goes on to describe Amitabha's Pure Land in great detail, with an emphasis on its beauty and sensuous qualities that no doubt surprised some of its readers then as now, given Buddhism's reputation for moderation if not strict asceticism.[27]

As we have already seen, the notion of numerous and perhaps infinite numbers of "buddha lands" or "realms" beyond this one has deep roots, going back to some of the earlier Buddhist texts. And yet, rarely were these lands or realms described in any detail, leading the reader to wonder whether they were intended to be understood as "real" places. With the Pure Land texts and schools, however, these ambiguities fade. While an important aspect of Pure Land practice involves visualization or meditation on the features of Sukhāvati, here is little doubt that the authors and adherents of Pure Land Buddhism believed Sukhāvati—as well as other, similar pure lands—to be actually existing places that one could (and should) reach upon one's death in this "fallen" world of ours.[28] In short, the ability to "imagine" Sukhāvati is a necessary preparatory stage for one's eventual rebirth there. One could say, then, that the Pure Land teachings allow the possibility of "mental" access to another "world" while alive in addition to the "surety" (assuming one is genuinely faithful) of complete—I hesitate to write *physical*, but certainly *sensual*—access after death.[29] The "onboarding" process involves a sudden "descent" (Jp. *raigō*) of Amitābha, on a "purple cloud" (Jp. *shiun*) formation that we might loosely call a spaceship, surrounded by his assistants (including musicians!). Along with depictions of Sukhāvati itself, paintings of Amida's descent to retrieve one of the faithful would become a staple of East Asian—and particularly Japanese art (see, e.g., Okazaki 1977). In Tibetan Buddhist traditions, funerals sometimes involve a tantric technique allowing for the ritual transference of consciousness (Tb. *phowa*) to the Pure Land.

Here are some of the highlights of the other-worldly paradise of Sukhāvati, which is said to exist far to the West, beyond the realms of ordinary rebirth or *samsara*: the Earth is composed of seven types of precious metals and stones, all of which produce light rays that "intermingle and create manifold reflections, producing a dazzling illumination" ("The *Larger Sutra*," section 10; see Figure 3.1). The trees are also covered in jewels, bells, and other adornments, as are the various palatial structures and towers, making the entire realm glow in a soft light.

FIGURE 3.1 Amitabha, the Buddha of the Western Pure Land (Sukhavati) (Metropolitan Museum of Art).

There is abundant water in pools and streams, each exhibiting excellent qualities and water levels, which can be changed at will (convenient!). While there are no mountains, seas, valleys, or gorges, these can be manifested at will by the Buddha's power. Pleasant sounds abound, from the songs of various birds to the tinkling of the bell and jewel-encrusted trees. Finally, there are no seasons, but the temperature is always moderate and pleasant.

In the center, on a massive lotus in a terraced pond, sits a boundlessly immense Amitabha himself—attended by the great bodhisattvas Avolakiteśvara (Ch. Guanyin; Jp. Kannon) and Mahāsthāmaprātpa—in deep contemplation but ready to instruct whenever a supplicant requires it. Despite his appearance of deep meditation, Amitabha is always ready to provide teaching to arrivals in the Pure Land,[30] as well as to the numerous bodhisattvas from other realms who have arrived by portal to hear the good news.[31] As in other classic Mahayana sutras, the boundaries of space and time are permeable, and awakened beings travel at will both spatially and temporally in order to provide release from suffering (or "salvation") for sentient beings, in particular humans. It is worthy of note that the Chinese *jingtu* 浄土 can mean both a nominal "pure land" and also an agential "purification of the land" by a buddha or bodhisattva. Indeed, this latter sense may have been primary, as it reflects the focus of the Indian Mahāyāna on bodhisattva practice, but over time and the transfer to East Asian cultural forms, the term came to imply the place itself as much as the action of transformation.[32] Indeed, while the power of Amida Buddha never recedes, we might say that it is Sukhāvati itself that performs the "purification" of those souls reborn in its midst.

In short, Sukhāvati, the Land of Bliss or Pure Land of Amitabha Buddha, is a "world of another dimension," conceived both "spatially as a faraway and separate, and temporally as different from this one." And yet, through the "saving grace" of Amitabha Buddha, sentient beings can access this realm, mentally prior to and "physically" after their earthly demise. What makes the Pure Land distinct from other "realms" within classical Buddhism—such as those enumerated above, such as the dwelling places of the gods, hungry ghosts, or hell beings—is that it is, unlike them, entirely beyond the cycle of suffering, and of birth and death (Fujita and Otowa 1996, 46–47). "The word Sukhavati actually refers to the place where the absolute and other-worldly bliss of nirvana reigns. It is thought that this word skillfully describes this in material terms, making use of images taken from the relative and worldly plane of human desire … The Pure Land is not simply the 'other world'; it is none other than the world of the 'other shore,' which transcends the cycle of birth and death" (ibid., 47).

Buddhist Utopia?

Although the conception of *utopia* is not identical to that of "other worlds," given the overlap between utopian writing and science fiction since the mid-20th century, it may be worthwhile to turn briefly to the way that utopian thinking is

manifested within Asian Buddhist traditions, before looking more closely at an example of Buddhist-inflected science fiction writing.

Steven Collins helps us to better situate the ascetic and "other worldly" elements of classical Buddhism in the context of Indian conceptions of the sacred and society. The Indian tradition of renunciation, Collins argues, as embodied in the "heterodox" traditions of thought and practice, is a renunciation of "ritual practice" above all else and, by extension, represents a rejection of "faith" in the powers of revelation (and perhaps, the aspiration to transcendence) that undergirds so much of traditional, "this-worldly/other-worldly" religion (Collins 2013, 189). That said, Collins acknowledges the dichotomy in early Buddhism between *lokiya* and *lokuttara*, "which can be translated as 'worldly/superworldly,' and which parallels in certain ways the social dichotomy of layman/monk" (Collins 2013, 190). Working with Collins's insight, we might suggest that Buddhist asceticism—always, at any rate, tempered at least in theory by the appeal to moderation—involves first and foremost a radically different form of *relating* to things of the world, including, of course, other people. It could be, then, an intensified *this-worldliness*—this, I argue, is the way that Japanese New Buddhists understood their "secular" Buddhism (albeit for the New Buddhists this transformation was *only* possible outside the monastic setting; see Shields 2017b).

Collins emphasizes the *sociality* of the Buddhist monastic community, one that is rooted in a deep sense of *friendship* that "resists commonplace reproductive-kinship relations" (Collins 2013, 194), and thus (perhaps unintentionally) opens up other, explicitly utopian possibilities of alternative models of economic and political relation. And yet, Collins is ultimately unwilling to classify the *sangha* in classical Buddhism tradition as "utopian" in the full sense. In Buddhism, "one can see various versions of an 'ideal society' … But one cannot, as far as I can see, trace anything comparable to the utopian mode proper, and still less any sense that the monastic community might be a prototypical form of such a perfectly planned community" (Collins 2013, 210).

Setting aside Collins's doubts as to the universalizability of the Buddhist monastic ideal as found in the early *sangha*, one finds an unmistakable utopian element in some later Mahāyāna formulations, such as that of Japan's Hokke or Nichiren sect, based on the *Lotus Sutra* as well as the writings of Nichiren. This is especially due to the collapsing of spheres that the *Lotus Sutra* seems to engender—between text and "reality," theory and practice, and this and other worlds. For Nichiren, "there is only one *sahā* world. Vulture Peak, the place where the Lotus Sutra is taught, represents both this world of ours and the most perfect world, the only possible 'paradise'. There is no other reality, neither for humanity, nor for the Buddha" (see Dolce 2002, 232–233). The point is not, for Nichiren, that we are presently living in the perfect world, but rather that we are living in a world that is, with faith, dedication, and great effort—"perfectible." As Linda Dolce puts it, his emphasis "is not on the absolute per se, but on the relative that has to become absolute" (Dolce 2002, 235). For modern Japanese Buddhists working

on Nichirenist premises, this works as a call to social and political engagement (see Shields 2013). However, for premodern adherents of Nichiren or the *Lotus Sutra*, the primary driver of this transformation was the radical reconfiguring of "reality"—and associated "powers"—that comes with Buddhist awakening.

Buddhist Sci-Fi?

This chapter has explored some of the ways that classical Buddhist texts and particularly Mahāyāna sects have dealt with the broad topic of "other worlds." In this final section, I briefly explore some instances of the reverse: i.e., where Buddhist thought has had an impact on science fiction writing, particularly on the themes of other worlds. While it is fair to say that, in general, modern science fiction writing in the West has largely abandoned traditional Western religions of Judaism and Christianity, Asian religious and philosophical traditions get more sympathy in 20th- and 21st-century speculative fiction.[33] One major 20th-century writer of speculative fiction whose work delves somewhat more deeply into Asian religious concerns is Ursula Le Guin (1929–2018), author of classic works such as *The Left Hand of Darkness* (1969), *The Dispossessed* (1974), and *Always Coming Home* (1985).

In *The Dispossessed* (subtitled: *An Ambiguous Utopia*), Le Guin relates the struggles of Shevek, a brilliant scientist who travels from his "utopian" home world of Annares to the "home planet" of Urras, which more closely resembles the Earth of the Cold War era. While Le Guin refrains from uplifting Shevek's world as a perfect utopia, the collectivist and quasi-Luddite mentality of the Annarestians is contrasted with the consumerist and hierarchical norms of the Urras. While these progressive concerns are not, of course, intrinsically "Buddhist," the novel makes explicit reference to the problem of suffering as a focus for Annarestian social life. At one point Shevek says: "Suffering is the condition on which we live … no society can change the nature of existence. We can't prevent suffering. This pain or that pain, yes, but not Pain" (Le Guin 1974, 60). Moreover, the solution posited by Shevek is precisely that of classical as well as Mahāyāna Buddhism: "If instead of fearing [suffering] and running from it, one could … get through it, go beyond it. There is something beyond it. It is the self that suffers and there's a place where the self—ceases" (Le Guin 1974, 60).

Here Buddhism (and, arguably, Daoism) is a source for a generalized resistance against capitalist modernity and associated political structures—i.e., as a foil to combat technophilic futurism. In contrast to the more generalized appropriations of "Asian" cosmological tropes as one finds in the "Daoist" Force of the *Star Wars* series and arguably *Upanisadic* understanding of awakening in the *Matrix* movies, Le Guin employs specific, foundational Buddhist teachings to suggest an alternative, possibly "better" way of individual and social being. And yet, as it becomes clear throughout the novel, the protagonist Shevek is dissatisfied with the social reforms instituted in his homeland, which suggests that a more "Buddhist" approach may add a dimension lacking in the anarcho-communist society

of Annares. Moreover, toward the very end of the story, Shevek appears to achieve some level of awakening via his scientific work on "the fundamental unity of Sequency and Simultaneity," in which what was once separate and distinct becomes unified—in ways that parallel the "powers" achieved by buddhas and bodhisattvas in the various Mahāyāna texts cited above.

Conclusions

By way of conclusion, I suggest that at least certain significant Buddhist texts, including the Mahāyāna *sutra*s discussed above, might be best read as examples of *speculative fiction*. Though broadly defined—and generally intended to cast a wider net than the more confining label of "science fiction"—speculative fiction is a literary genre that deals with elements that do not exist in history, nature, or the present universe. While this may occasionally include aspects of the "supernatural," as I understand it, this term better belongs to so-called *fantasy* literature.[34] Beyond sheer entertainment, of course, the point of much speculative fiction—including the works of Le Guin—dovetails with the purpose of the older genre of utopian (and dystopian) writing: i.e., to present alternative realities as a way to help the reader confront current and potential future problems, both individual and collective, particularly forms of suffering that, without a radical change in the way we perceive the world, we might not otherwise notice.[35] In this reading, speculative fiction plays the role of a critical lens, in which (as with utopian fiction) the imagination is employed to shift our ordinary assumptions and perspectives not only with regard to what is possible, but also on what is "real" and "true." This, I suggest, is precisely the aim of early Mahāyāna texts such as the *Lotus*, *Avataṃsaka*, and *Sukhāvati* sutras, all of which employ grandiose language and explosive imagery to suggest that "reality" is or can be quite different from the way things normally appear and that "awakening" to this fact provides a measure of power and control over one's life—and one's suffering—that is currently unimaginable.

Notes

1 While I appreciate Bernard Faure's work on dismantling overgeneralizations about "Buddhism" in order to restore "the complexity and richness of the Buddhist tradition," this sentiment can be taken too far, such that it becomes impossible to make any claims at all about "the Buddhist tradition" (Faure 2009, 4).
2 "Buddhism," first employed in a Western text in 1801, was derived from "Buddha," coined in the 1680s to refer to the founder of the tradition, based on the Pali root *buddha-* (to awake, know, perceive).
3 Though there are countless sources in the Buddhist canon for this basic teaching (e.g., the Four Noble Truths), in thinking through what this means for ethics, I default to the Buddhist formulation of the "Golden Rule" as found in the *Saṃyutta-Nikāya*: "For a state that is not pleasant or delightful to me must be so to him also; and a state that is not pleasing or delightful to me, how could I inflict that upon another?" (cited in

Harvey 2000, 33). What should be underscored here is that this logical reflection is derived from a naturalistic, even Epicurean premise—which Schmidt-Leukel calls a "fundamental insight" of classical Buddhism—that all beings "[…] yearn for happiness and recoil from pain" (*Majjhima-Nikāya* 51; see Schmidt-Leukel 2010, 54).

4 In Chinese: 方便 (*fangbian*) and Japanese: 方便 (*hōben*). As Richard Gombrich writes: "It is true that the term translated 'skill in means', *upaya-kausalya*, is post-canonical, but the exercise of skill to which it refers, the ability to adapt one's message to the audience, is of enormous importance in the Pali Canon" (Gombrich 1997, 17).

5 To the point where a modern reader of the *Lotus Sutra* is left wondering whether this fascinatingly weird book has, to borrow from Gertrude Stein, "any there, there"; in other words, whether, to invoke Marshall McLuhan, the *Lotus Sutra* is in fact *all medium, no message*.

6 *Aṅguttara Nikāya* 3. *Tika Nipāta* 8. *Anandavaggo.* <http://metta.lk/tipitaka/2Sutta-Pitaka/4Anguttara-Nikaya/Anguttara1/3-tikanipata/008-anandavaggo-e.html>

7 The early *sutta*s contain many references to such powers; see Powers 2012. Often these are associated with the ability to move between the "world systems"; see, e.g., *Anguttara Nikaya 3. Tika Nipata 8. Anadavaggo*: "Here Ānanda, the Thus Gone One pervades the three thousandfold and the great thousandfold world system with an effulgent light, so that those sentient beings see it, then the Thus Gone One makes a sound. In this manner an announcement is made to the three thousandfold and the great thousandfold world system if he desires."

8 One classical Buddhist metaphor for this almost inexpressible unit (often translated as an "aeon") is the time it takes to erode a solid rock measuring 1 cubic mile by brushing it with a silk cloth once a century. Other versions exist involving butterflies.

9 The six world system cosmology is a product of the Abhidharma—commentary on the earliest Buddhist texts begun as early as the 3rd century BCE that attempted to provide a more systematic guidance for Buddhists—and appears to have been pieced together from hints found in the early Pali *suttas* as well as the *vinaya* (monastic codes); see Gethin 1988, chapter 5.

10 Generally the first three of these realms are considered "lower," while the last three are "higher"; i.e., more fortunate, realms in which to exist and be reborn. In the earliest versions, there are only five realms, with the "wrathful spirits" or "demigods" added later, perhaps for the sake of symmetry. East Asian texts frequently further subdivide these six realms into dozens of sub-realms.

11 Perhaps the closest analogue with Dante are the various "hell scenes" that adorn a good number of Japanese Buddhist temples screens and scrolls, some of which put the tortures of the damned in Dante's Inferno seem positively quaint.

12 The AS is the 27th sutta of the *Dīgha Nikāya* collection and was composed between the 3rd century BCE and the 2nd century CE.

13 There is some debate within Buddhist Studies on the question of whether the AS should be read as a critique and/or satire of the caste system. See, e.g., Gombrich 1988, 85; Sugunasiri 2013.

14 There are interesting parallels here to the Chinese classic *Daodejing*, composed at the same time or slightly earlier, which also posits an origin story that begins in pure formlessness and "declines" into form, matter, and social and conceptual distinctions; see Ames and Hall 2003.

15 Mahāyāna Buddhism also flourished in West Asia, but those areas (i.e., parts of present-day Afghanistan and Pakistan) would eventually convert to Islam, leaving West Asian Buddhists a tiny remnant.

16 Some of what follows has been adapted (with permission) from Shields 2011.

17 Whereas the *Lotus Sutra* formed the foundations for several prominent East Asina sects—such as Tiantai/Tendai and the Lotus or Nichiren sect—and was also revered in the Chan/Zen traditions, the *Avataṃsaka*'s impact was mainly felt in one sect, the

Huayan (Jp. Kegon) school, whose influence was much stronger in Japan than in China. See Cleary 1987.

18 Unlike *The Matrix*, of course, here there is no "deeper reality" beyond the "illusion"; see Ford 2003.

19 Translated by Gomez; cited in Williams 2009, 121.

20 *Avataṃsaka Sutra*, Bk 4 (The Formation of the Worlds), pp. 183–184.

21 A*vataṃsaka Sutra*, Bk 4 (The Formation of the Worlds), p. 186.

22 Known separately as the *Gaṇḍavyūha* (Excellent Manifestation) *Sutra*, this text dates to roughly 200 CE.

23 "This woman was settled in a polluted, fearsome realm, making it hard for people to believe in her; so the land was called Danger. By means of meditation, she entered into defiled realms and turned them all into spheres of knowledge; by virtue of great compassion, she remained in the ordinary world, and by virtue of knowledge she remained unaffected, so her city was called City of Jewel Arrays" (Cleary 1987, 1599).

24 The mind melting experience of Sudhana has much in common with that of Hayy ibn Yaqzan (or "Life Aware-son"), the protagonist and spiritual seeker of Ibn Tufayl's masterful 12th-century work of Islamic thought; see Goodman 2009.

25 Technically, there are hundreds of texts in the Chinese Buddhist canon that speak of Amitabha and his Pure Land, but Japanese tradition has focused on three texts chosen as canonical by sect founder Honen (1133–1212): The *(Longer) Sutra on the Buddha of Infinite Life*, the *Sutra on the Visualization of the Buddha of Infinite Life*, and the *(Shorter) Sutra on the Buddha of Infinite Life*.

26 The Sanskrit *sukha* is, in fact, a direct opposite of *duḥkha* or suffering, which all forms of Buddhism attempt to ameliorate if not eradicate. As a form of joy or pleasure, *sukha* is thought to be lasting, as opposed to *preya*, transient pleasure.

27 On one level, we might attribute this focus on the overwhelming beauty and sensuousness of Sukhāvati to the general Mahāyāna penchant for iconoclastic reversals of traditional Buddhist ideals, but the more significant reason is surely that, as in other traditions, such imagery acted as a powerful inspiration to ordinary, non-literate believers. Comparatively speaking, in terms of "worldly" splendor, neither the Christian heaven nor even the Islamic paradise (Ar. *Jannah*) comes close.

28 It is true that from the early 20th century Pure Land Buddhist thinkers in Japan have at times suggested that the Pure Land of Amida is best conceived as a "state of mind," but this is a product of Buddhist modernism.

29 While all who call on Amida with a faithful heart are guaranteed rebirth in Sukhāvati, not all are reborn into the same location or condition: e.g., those with doubts must remain in their lotus bud rebirth pods for 500 years before setting foot onto the Pure Land.

30 Pure Land doctrine teaches that the traditional Buddhist goal of awakening or *nirvana* can only be achieved once one has been reborn in Sukhavati, as our ordinary world is mired in a long period of decline (Jp. *Mappo*), which renders traditional Buddhist methods insufficient.

31 The text specifically mentions 14 of these other "buddha lands," including our own, called Sahā, where Śākyamuni dwells ("The *Larger Sutra*," section 27).

32 See Fujita and Otowa 1996, 34, also 48, where the authors discuss the purification of our own Sahā world, beginning with Vulture Peak, by the Buddha Śākyamuni (as noted in the *Lotus Sutra*). Even in this case, the "Pure Land" might "conform" to our world, but is distinctly not "of" it.

33 Various lists of "Buddhist-inspired" sci-fi can be found on the Internet; some of the books listed include Roger Zelazny's *Lord of Light* (1967), Dan Simmons' *Hyperion* (1989), Victor Pelevin's *Buddha's Little Finger* (1996), Terry Pratchett's *The Long Earth* (2012), Sally Ember's *This Changes Everything* (2013), Ramez Naam's cyberpunk *Nexus*

trilogy (2012–2015), and even—though it seems more of a stretch—Robert Heinlein's 1961 classic *Stranger in a Strange Land*.

34 Here I diverge from Le Guin, for whom *science fiction* is the branch of speculative fiction that involves a "realistic" approach to what's possible, while *fantasy* deals in things that could not happen in our world.

35 Many scholars have elaborated on the theme of "utopia as critique"; see Morrison 1984, 139–140; Jameson 2010; and Sabia 2002. For science fiction as a critique, see Tunić 2018.

Works Cited

Ames, Roger T., and David L. Hall (2003). *Daodejing: A Philosophical Translation*. New York, NY: Ballatine.

Cleary, Thomas (1987). *The Flower Ornament Scripture: A Translation of the Avatamsaka Sutra*. Boulder, CO: Shambhala.

Collins, Steven (2013). "Monasticism, Utopia and Comparative Social Theory." In *Self & Society: Essays on Pali Literature and Social Theory, 1988-2010*, 185–226. Chiang Mai, Thailand: Silkworm Books.

Dolce, Lucia (2002). "Between Duration and Eternity: Hermeneutics of the 'Ancient Buddha' of the Lotus Sutra in Chih-i and Nichiren." In *A Buddhist Kaleidoscope: Essays on the Lotus Sutra*, ed. Gene Reeves, 223–239. Tokyo, Japan: Kōsei Publishing.

Faure, Bernard (2009). *Unmasking Buddhism*. Chichester, UK: Wiley-Blackwell.

Ford, James L. (2003). "Buddhism, Mythology, and *The Matrix*." In *Taking the Red Pill: Science, Philosophy, and Religion in* The Matrix, ed. Glenn Yeffeth, 125–144. Dallas, TX.: Benbella Books.

Fox, Alan (2015). "The Practice of Huayan Buddhism." In *Chinese Buddhism: Past, Present and Future*, 259–285. Yilan, Taiwan: Foguang University Center for Buddhist Studies.

Fujita, Kōtatsu, and Rebecca Otowa (1996). "The Origin of the Pure Land." *The Eastern Buddhist, New Series* 29, 1 (Spring): 33–51.

Gethin, Rupert (1988). *The Foundations of Buddhism*. Oxford, UK: Oxford University Press.

Gombrich, Richard (1988). *Theravada Buddhism: A Social History from Ancient Benares to Modern Colombo*. New York, NY: Routledge and Kegan Paul.

Gombrich, Richard M. (1997). *How Buddhism Began: The Conditioned Genesis of the Early Teachings*. New Delhi, India: Munshiram Manoharlal.

Gómez, Luis Oscar (1967). "Selected Verses from the Gandavyuha: Text, Critical Apparatus and Translation." PhD Dissertation. Yale University.

Harvey, Peter (2000). *Introduction to Buddhist Ethics*. Cambridge, UK: Cambridge University Press.

Goodman, Lenn Evan (2009). *Ibn Tufayl's Hayy Ibn Yaqzan: A Philosophical Tale*. Chicago, IL: The University of Chicago Press.

Jameson, Frederic (2010). "Utopia as Method, or the Uses of the Future." In *Utopia/Dystopia*, eds. Michael D. Gordin, Helen Tilley, and Gyan Prakash, 21–44. Princeton, NJ: Princeton University Press.

King, Sallie B. (2009). *Socially Engaged Buddhism*. Honolulu, Hawaii: University of Hawai'i Press.

Kraft, Ken (1999). *The Wheel of Engaged Buddhism: A New Map of the Path*. Boston, MA: Weatherhill Publishing.

"The Larger Sutra" (2003). In *The Three Pure Land Sutras*, trans. Hisao Inagaki, 1–31. Berkeley, CA.: Numata Center for Buddhist Translation and Research.

Le Guin, Ursula K. (1974). *The Dispossessed: An Ambiguous Utopia*. New York, NY: Harper Voyager.

Morrison, Alasdair (1984). "Uses of Utopia." In *Utopias*, eds. Peter Alexander and Roger Gill, 139–151. London, UK: Duckworth.

Okazaki, Jōji (1977). "Pure Land Imagery." In *Pure Land Buddhist Painting*, trans. and adapted by Elizabeth ten Grotenhuis, 103–130. New York, NY: Kodansha International.

Powers, John (2012). *A Bull of a Man: Images of Masculinity, Sex and the Body in Indian Buddhism*. Cambridge, MA: Harvard University Press.

Queen, Christopher, and Sallie B. King (1996). *Engaged Buddhism: Buddhist Liberation Movements in Asia*. Albany, NY: SUNY Press.

Sabia, Daniel (2002). "Utopia as Critique." *Peace Review* 14, 2: 191–197.

Schmidt-Leukel, Perry (2010). "Buddhism and the Idea of Human Rights: Resonances and Dissonances." In *Buddhist Approaches to Human Rights: Dissonances and Resonance*, eds. Carmen Meinert and Hans-Bernd Zöllner, 41–61. Berlin, Germany: Verlag.

Shields, James Mark (2011). "Lotus Sutra." *Milestone Documents of World Religions*, ed. David M. Fahey, 372–389. Dallas, TX: Schlager Group.

Shields, James Mark (2013). "Political Interpretations of the *Lotus Sutra*." In *A Companion to Buddhist Philosophy*, ed. Steven Emmanuel, 512–523. London, UK: John Wiley & Sons.

Shields, James Mark (2017a). *Against Harmony: Progressive and Radical Buddhism in Modern Japan*. Oxford, UK: Oxford University Press.

Shields, James Mark (2017b). "Immanent Frames: Meiji New Buddhism and the 'Religious Secular'." *Japan Review: Journal of the International Research Center for Japanese Studies* 30: 79–96.

Sugunasiri, Suwanda H. J. (2013). "Devolution and Evolution in the *Agañña Sutta*." *Canadian Journal of Buddhist Studies* 9: 17–104.

Tunić, Srdan (2018). "Science Fiction between Utopia and Critique." *Uneven Earth* (11 June); available online: <http://unevenearth.org/2018/06/science-fiction-between-utopia-and-critique/> (accessed 30 June 2022).

Williams, Paul (2009). *Mahāyāna Buddhism: The Doctrinal Foundations*. New York, NY: Routledge.