fierce, smiling Angel, manifesting in space, holding chopper and skull bowl. May the miracle Scientists protect all beings!

OM AH HUM
To the entire Scientist Hero and Angel host, I bow, offer, take refuge, and pray. When I and others transit from life, just after leaving the body, when those reality-between visions dawn, when I roam the life cycle through powerful instincts, on the light path of the clear orgasmic wisdom, may the hero Scientists guide my path! May the supreme mother Angel host support me from behind! May they deliver me from the straits of terror of the between! May they carry me to the pure angelic worlds!

OM AH HUM
In this time of abiding in the life between, the Scientist Heros and Angels, in the palace of my body’s throat beatific wheel, sit vividly in bodies made of the live lights. When I and others transit from life, just after leaving the body, may the Scientist Deity host emerge from within my throat. May they arise and fill the space before me. May they manifest music and dancing. May they shake and energize the whole universe. With their orgasmic wisdom light-path of brilliant, penetrating rays, when the animal delusion path arises, may the Scientist Deity host’s compassion not be feeble. May they bring me back from the path of animal delusion! May they lead beings to the path of orgasmic wisdom! May they care for me compassionately, to recognize the reality of the between! May they consecrate me to become a Scientist Bodhisattva!

Bronislaw Szerszynski

The emergence of Mangalayana Buddhism at the end of the twenty-first century CE has to be understood against the background of the wider emergence of a planetary—and indeed postplanetary—culture at that time. Of course, this culture was not “planetary” in the sense of being globally homogeneous; the hopes and fears that had been variously felt at the beginning of that century—that American culture would come to dominate the globe—soon faded, as economic, political, and cultural power spread around the Earth in complex, overlapping waves. Rather, by the late twenty-first century, what nearly all of the various cultures of the Earth were coming to share was a new awareness of the planetary context—and consequentiality—of human society: that this society is a phenomenon of an evolving planet, and radically shapes its evolution; and that planets are multiple and interconnected.

This change in human consciousness was deeply felt in the sphere of religion, to the point where the late twenty-first and early twenty-second centuries have been labeled the Second Axial Age. The First Axial Age, according to twentieth-century philosopher Karl Jaspers, had occurred around the middle of the first millennium BCE, when figures such as Plato, Zoroaster, Deutero-Isaiah, Mahavira, Gautama Buddha, and Confucius were each instrumental in profound shifts in their respective cultures. Hitherto, religion and ritual had largely been oriented to the reproduction of a cosmos understood as a monistic whole, albeit a multiplex one containing diverse agencies and realities. Instead, cultures across a broad swathe of Eurasia started to orient themselves in different ways around a dualistic distinction between “this” world and a transcendent reality understood to exist “above” it. The religions of the First Axial Age involved a turning away from the empirical world, whether through conforming to religious law or abstract reason, or through sacramental systems or mystical exercises promising salvation. But, by turning away from “this” world, in that very same gesture they constituted it in thought for the first time as a unified cosmos governed by a single principle.
The Second Axial Age was very different, emerging as it did under very special circumstances. Accumulated scientific advances over centuries were starting to offer a greater understanding of the complex transformations that the Earth had undergone in a “deep time” that spanned billions of years—an extraordinary human achievement. A turbulent and unpredictable period of anthropogenic environmental change in the twenty-first century produced, belatedly, a growing recognition of the interconnected fate of human society and wider planetary processes. Yet the realization that human activity had become so significant that it was producing substantial changes in the very mode of becoming of the planet, and that human science was capable of recognizing this, coexisted with the sensed inability to predict these changes in any detail, let alone avert or modulate them significantly. Paradoxically, human exceptionalism and autonomy seemed to be being disproved at their very apogee. Two technological developments also played a key role. Advances in computing, and particularly in artificial intelligence, meant that first cognition and then sentience were expanding beyond the confines of the organic; at the same time, a tentative period of interplanetary exploration was followed by a rapid expansion of human activity into the near solar system. There was a growing sense that the Earth was shifting into an unprecedented new state. And then came the encounter with the Common Culture of our galaxy in 2032.

The story of this first encounter is too complex, and indeed already too familiar, to warrant relating it in any detail here: the discovery of the monument on Mars, the delegation to the galaxy’s Commission on Planetary Ages with a proposal to name the new age of the Earth after *Homo sapiens*, and the Commission’s surprising negative response. But what was more significant for Earth religion was the sudden exposure to a highly advanced culture that had evolved over a billion years, that incorporated a dizzying variety of worlds and species across the galaxy, and that had developed a radically different way of looking at the cosmos. On Earth, the twenty-first century had already given rise to new religious movements, including ecomillennialism, cosmism, and transhumanism. Many of these, like secular modernity, can now be seen as last ripples of the dying First Axial Age. But with the Earth undergoing a double opening up in mid-century—the opening of the Earth’s geosphere to its noosphere, and the opening of the Earth system itself to its astral environment—its cultures started to shift around a new axis.

The historian of religion Julia Viñas described the Second Axial Age as departing from the first in three main respects. The first, perhaps not surprisingly, involved the perception of space. In the past, any move to a “many worlds” view of the universe had generally been imagined using analogies with familiar Earth-bound practices and experiences such as exploration, colonization, international relations, and multiculturalism. But the reality turned out to be very different, and involved a shift in experience and thinking that has been likened in its profundity to the recognition that there is more than one language. The second departure involved the perception of matter. There were some useful homologies between the Common Culture’s understanding of matter and some existing currents of thought in Earth cultures, including Daoism, panpsychism, and the science of complex systems. Yet the Common Culture’s grasp of matter’s power to organize itself, in dynamically interlinked spatial, temporal, and complexity hierarchies, represented a huge challenge to dominant ways of thinking in Earth cultures. The third change involved a different understanding of time. In the intellectual history of Earth cultures, the move to an absolute understanding of time, as an ontologically prior container for the events that take place “within” it, had been seen as a major step forward in understanding, in which the work of Isaac Newton had been crucial.
Even Albert Einstein's move to a relativistic understanding of spacetime still basically cleaved to a container model of time. By contrast, the Common Culture's view of time as a plural, interlocking nexus of temporalities produced internally by the self-organizing activity of things seemed to invert the now-dominant way of thinking about the relation between event and matter.

Viñas argues that underlying all three changes was a new relationship with infinity, with unboundedness. Whereas the First Axial Age typically understood the infinite in science, religion, and ethics as background, origin, or command respectively—fundamentally, as an exteriority—the Second Axial Age started to find the vertiginous experience of the infinite as an interiority within things themselves as they engaged in the great dance of self-organization. No longer was the infinite seen as standing outside the empirical world, thereby constituting the latter as a bounded, finite unity. Now, the infinite was conceived and experienced as situated inside that world, as an inherent aspect of its apparent finitude, thus shattering its unity into boundless difference. If we could still speak of religion as forming a separate sphere in the new Axial Age, it was one that came to be dominated not by the immanence–transcendence couplet of the First Axial Age, but by what became called “intrascendence” (the combination of “in-” and “trans-” capturing the paradoxical combination of both “within” and “beyond”), a new spiritual apperception of the endless, active difference within things.

If the Second Axial Age thus posed a whole new set of questions to humanity to deal with, it was arguably tantric Buddhism that was most ready to provide answers. By the mid-twenty-first century, Asian cultures were becoming far more confident because of their newly restored economic and political significance. They also had in their cultural storehouse a rich intellectual heritage that would find new uses and meanings in the transformed human context—not least traditional Indian conceptions of time, with its vast system of ages. Asian cultural confidence was also boosted by the decision of the Commission on Planetary Ages that the Earth's new planetary “period” (the geological unit of time larger than an epoch but smaller than an era) should be named in Sanskrit, in a clear riposte to Western arrogance. Thus the Earth entered the “Suryamandalan” or “solar-system” period—the period in which the becoming of the planet escaped its own boundaries and became fully incorporated into a larger, evolving star system. With the inauguration of that period, the Tibetan bardo—the intermediate stage—took on a new meaning as a stage of transition in planetary time, and Bardo Thodol would find a whole new function and audience.

In order to understand its transformation in Mangalyana Buddhism, it is worth rehearsing the origins of Bardo Thodol, or “Liberation through Hearing in the Intermediate State.” The Tibetan interest in funerary practices had long predated the arrival of Buddhism from India, focusing largely on warding off the danger from recently deceased spirits. In a Buddhist context, this translated easily into a concern to help the deceased achieve liberation from the cycle of rebirth. Bardo—literally, “between-suspended”—was the Tibetan translation of the Indian Buddhist concept of antarābhava—“interval-being”—and initially referred to the interval between death and rebirth, during which it was possible to intervene in order to halt the cycle of rebirth. But it had always had a wider meaning, in which all phases of time could be seen as bardos, and thus as potential occasions for enlightenment.

The text itself is an instruction manual to be recited to the deceased in the hours and days after death, and was discovered—or more likely brought together—by the fourteenth-century CE mystic Karma Lingpa in Daxpo, southeastern Tibet. Two main influences were combined in Bardo Thodol: the Dzogchen (“Great
Perfection”) tradition of the Nyingma school, which fuses the individual’s narrative of birth and rebirth with the cosmological story of the emergence and development of the cosmos from an undifferentiated pure ground (kadag); and the mandala of 100 peaceful and wrathful deities from the tantric Mahayoga tradition with its focus on visualization techniques.

However, in the Second Axial Age, the Tibetan tradition was to give birth to a whole new branch of Buddhism. The use of the high Tibetan plateau as a training ground for China’s Mars missions in the 2010s and 2020s had laid the groundwork for a significant Tibetan presence when China established its first Martian colonies in the middle of the century. The first Tibetan Buddhist monastery on Mars was established in Noctis Fossae in 2072 by the monk who would take the name Migdmargyi Norbu Rinpoche—“jewel of Mars”—and would become the principal founder and systematizer of Mangalayana (“Mars-vehicle”) Buddhism. Migdmargyi Norbu engaged with the new sciences of planetary becoming, as informed by the Common Culture. But, like many other religious thinkers at this time, he also immersed himself in a deep engagement with the Common Culture’s doctrine of the Palace of the Ages—the mythical, eternal resting place of those entities that have been crowned as the onomatopohores (“name-bearers”) of an age of their planet or other self-organizing system. This twin engagement was to effect changes of such magnitude in Buddhist doctrine and practice that it would be seen as founding a new “vehicle” for enlightenment, distinct not only from Theravada and Mahayana Buddhism but also from the Vajrayāna, tantric tradition that had given birth to it. And amongst the innovations, a new “treasure” literature was “found” on Mars—including a major new interpretation of Bardo Thodol.

Migdmargyi Norbu’s third-millennium transformation of Bardo Thodol retained the structure of the second-millennium version, an extract of which is reproduced above. His text thus faithfully follows the sequence of three bardos experienced after death, each corresponding to one of the three bodies (trikaya) of the Buddha, and each broken into two main phases. The first bardo, that of the moment of death, is the presentation of Dzogchen’s unmanifest, undifferentiated reality, experienced as a “first” and then a “second” luminosity. The second bardo consists of an encounter with peaceful and then wrathful deities, 100 in total. The third and final bardo involves the judgment of the deceased for their evil deeds, followed by the experience (for those who have not been successfully guided towards liberation) of being drawn towards rebirth in one of the six lokas or realms of samsāra. The vision of the five “scientist deities” described in the extract above occurs halfway through the second bardo and is transitional between the presentation of the peaceful deities and that of the wrathful deities. The scientist deities are in fact bodhisattvas, enlightened beings who have nevertheless held back from liberation from samsāra (’khor ba in Tibetan), the world of becoming and rebirth, in order to help the unenlightened. Around them dance dakinis, spirits in human form, with instruments and incense made from human bone and flesh and making enough noise for the whole universe to shake.

But Migdmargyi Norbu also introduced significant changes to Bardo Thodol: to the interpretations of existing elements within the text, to parts of the text itself, and to the wider set of Buddhist ideas and practices in which the text was situated. The first main shift was in the wider doctrine of the six lokas, the realms of samsāra into which beings can be reborn. These had traditionally consisted of the three lower realms of hell, hungry ghosts, and animals, and the three higher realms of humans, demigods, and gods. But Migdmargyi Norbu reinterpreted the lokas as the realms of rock, plant, animal, hna (or “rational organic being”), machine, and program respectively.

One factor shaping this move was the response of some Buddhists to the rapid progress in digital exocortexes, mindcloning,
and artificial intelligence in the 2030s and 2040s, and particularly to the first technically successful (although deeply controversial) uploading of human consciousnesses in the 2060s. This development occasioned a Buddhist movement arguing that nirvāṇa, liberation from the world of becoming, could be achieved through uploading—or even that it consisted in being uploaded. Some even started to use Bardo Thodol during the process of uploading, reading it out loud during the scanning, activating, and body-deleting processes in order to assist the uploaded individual in making the passage from the physical to the digital world. Migdmargyi Norbu’s personal papers reveal his determination to accommodate this new postincarnational experience into Buddhist lore, but also to resist its identification with nirvāṇa.

The changes that Migdmargyi Norbu introduced to the doctrine of the lokas were also clearly influenced by strands of European thought—such as Aristotle's distinction between the nutritive, sensitive, and rational souls of plants, animals, and humans, and Carl Linnaeus's three regna naturae (“kingdoms of nature”), the mineral, the vegetable, and the animal—but also by a deep engagement with the new postplanetary sciences. In Mangalayana Buddhism, the lowest realm—called Naraka-gati in Sanskrit, meaning “hell”—was reinterpreted as the abiotic world of minerals, fluids, and vapors. Yet this is not Linnaeus's Regnum lapideum, with its static classes of minerals, but a realm in which the animating processes of mechanics, dynamics, and thermodynamics mimic the tortures and cruelties of hell in Buddhist tradition, in the form of heat, pressure, collision, sliding, cracking, erosion, state change, and so on. The second loka, Preta-gati, the realm of hungry ghosts, became the realm of vegetation, of living things—liberated from the sheer violence of the physical world by their possession of a nutritive mode of being, but driven solely by the never-satisfied hunger of metabolic exchange with their environment. The third realm, Tiryagyoni-gati, remained the realm of animals, but the traditional interpretation of this as a realm of ignorance gave way to an emphasis on the instinctive relationship between the organism and its milieu, seen as both a blessing and a curse. The fourth realm, Manusya-gati, the realm of humans, was expanded after contact with the diverse peoples of the Common Culture to include all rational organic beings—what are known in the old galactic language as hnau. The final two lokas, like the first two, were more radically reinterpreted: Asura-gati, the realm of titans or demigods, became the realm of machines, of inorganic organized matter; and Deva-gati, the loka of divine beings, became the immaterial realm of artificial intelligence and uploaded consciousnesses, liberated from bodily limitations but nevertheless subject to their own illusions and attachments. These innovations helped to restore some coherence to the changes that were occurring to Buddhist beliefs and practices around rebirth on Mars, but they also accelerated them, as I will explain below.

Secondly, with the inauguration of the Suryamandalan period, the notion of the bardo, the intermediate state, took on an additional meaning as a stage of transition in planetary time. As indicated above, Buddhism had inherited from wider Indian thought an orientation to deep time. In Buddhism, the complex Hindu scheme of eons ranging from the very long to the incredibly vast had become a system in which a vast mahakalpa (“great kalpa”) consisting of four medium kalpas spanned the formation and destruction of the universe within an even greater cycle. Within Mangalayana Buddhism, consistent with the wider Second-Axial-Age move from time as exterior container to time as internal duration, the system of kalpas became seen as being driven by the self-organization and evolution of planets, star systems, galaxies, and other astronomical objects. Similarly, the doctrine of rebirth became understood as operating at all levels in the fractal geometry of the universe, including that of...
planets. Thus the notion of panspermia, in which life was thought to have been "seeded" from one planet to another through collisions and meteorites, became reinterpreted in terms of the doctrine of rebirth. Life and sentience were seen as transmigrating from one planetary host to another in a process that was thought to generate a further system of kalpas. In particular, the discovery that complex, iterative exchanges of biotic material had occurred between Earth and Mars over their long development led to an elaborate sciento-mythological account of the two planets' interlinked existence—one in which the obvious parallels between the high Tibetan plateau and Himalayas on Earth and Mars' vast Tharsis bulge with its great shield volcanos and nearby Olympus Mons, the tallest volcano in the solar system, played a central role as signs of the two planets' deep spiritual and material connection. The notion of bardo was transformed by these developments; consistent with the Dzogchen idea that the individual's journey of life, death, and rebirth and the cosmic drama of universal becoming were fundamentally one, Mangalayana ideas of "interval-being" made significant links between moments of individual rebirth—or liberation—and the transitions between planetary kalpas.

Thirdly, ideas of liberation from "this" world were transformed in Mangalayana Buddhism, as they were in all the religions of the new Axial Age. The encounter with the Common Culture, with its very different cosmology and metaphysics, had prompted many Earth religions to re-examine the concepts of "eternity" and "the eternal" that had been so central to their First-Axial-Age thinking about the origin and end of existence. Scholars noted that, before the First Axial Age, these words had indeed referred not to an exteriority of boundless time, but to the internal temporalities of events—to the action of flowing water in the case of most Sino-Tibetan words, and to those of vast but finite ages in the case of Indo-European languages. This sense that a primal depth to language and experience had been lost during the First Axial Age but was now being restored played a crucial role in validating the reinterpretation of religious doctrine and practice in terms of intrascendence. Regarding life after death, what would now be sought was not "eternal life" in the First-Axial-Age sense, but a "life of the ages." Here, Mangalayana Buddhism drew deeply on the Chinese Huayan Buddhist tradition, especially the Avataamsaka or "Flower Garland" Sutra, which describes an infinite array of "pure lands" (dagpai zhing) deep within the empirical phenomena of the world. Liberation from samsāra became understood not as moving to a non-temporal realm outside time, but as passing from shallow to deep levels of the internal temporalities of universal becoming. The goal of listening in the time of transition was thus to avoid being reborn into one of the six lokas and instead to be installed in the Palace of the Ages, the nexus of deeper times internal to the becoming of the universe.

Fourthly, of the 100 peaceful and wrathful deities encountered in the second bardo, the "scientist deities" underwent a particularly significant transformation and acquired a greater centrality to Bardo Thodol and the practices surrounding it. These beings appear on the seventh day of the second bardo, at the exact formal middle of the whole sequence. Like the other experiences encountered during the three bardos, their appearance is an opportunity for the deceased to attain liberation and thus to avoid rebirth into one of the six lokas. In Mangalayana versions of Bardo Thodol, and of the mandala used to illustrate the second bardo, the five deities are represented with characteristics and accoutrements that identify them explicitly with the pre- and postcontact sciences through which the deep history of planetary, stellar, and galactic development has come to be understood. They are "wisdom-holders" (vidyadhara in Sanskrit; rigdzin in Tibetan), bodhisattvas believed to be...
living on the Tharsis plateau. The wisdom that they hold is about the six lokas of rebirth, the processes of pratityasamutpāda ("dependent co-origination") that govern the six lokas, and the deep time of universal becoming within these processes. As bodhisattvas, they have committed themselves to using this knowledge to help others achieve the transcendence that they themselves have foregone.

The rigdzin are depicted in the state of "intrance," gazing into the far distance in order both to see and to indicate the great perfection (dzogchen) of the deeper temporalities within the world's continuous emergence. In the center of the mandala is padma gar-gyi dbang phyug (the Sanskrit Padmanarashvarā), the fully accomplished scientist of emergence and Lord of the Lotus Dance (Fig. 1); the lotus (padma), growing as it does in muddy water, symbolizes the emergence of order and beauty from chaos and the transcendent presence of nirvāṇa within saṃsāra. Around him are arranged the four other rigdzin: in the east and south stand the scientist-bodhisattvas of analysis; in the north and west are those of synthesis. In the east is sala gnaspai rigdzin, the scientist of the enduring (gnas) of the Earth (sala), holding a fossilized skull and a geologist's hammer—the fossil and the hammer being the keys that unlocked the mysteries of deep, geological time in the nineteenth century CE (Fig. 2). In the south is tshela dbangpai rigdzin, the scientist with power (dbang) over life (tse), whirling around her head a centrifuge and holding a proteome mapper, symbolizing the precontact sciences of living things (Fig. 3). In the north is lhun gyi grubpai rigdzin, the scientist deity of spontaneous (lhan) arising (grub), holding the divining rods and scrying screen used in the sciences of autopoiesis or self-organization (Fig. 4). Finally, in the west, phyag-rgya chenpoi rigdzin, the scientist of the great (chen) seal (phyag), makes the mudras, the hand sigils, that signify the non-dualistic apprehension of reality as a whole (Fig. 5). The rigdzin are surrounded by a host of dakinis, represented as monstrous, uncanny hybrids that straddle the categories of the different lokas (Fig. 6). For example, some are abiotic phenomena displaying features of life: whirlwinds maintaining themselves through metabolic exchange with their environment, or rivers altering the landscape around them to improve their flow. Others are swarms or herds of animals that display emergent signs of intelligence and will, or people or gods with accentuated machinic or mineral aspects to their bodies or minds.

The fifth and final change to be discussed here concerns the fate of those amongst the deceased who do not achieve liberation during the bardo experience, and who, during the third bardo, are perceived by the attending lama to have been drawn towards a "womb entrance" and thus to rebirth in one of the lokas. The Mangalayana innovation in this domain went far beyond the merely textual or iconographic, and involved radical changes in the whole Tibetan Buddhist funerary tradition. The five traditional Tibetan forms of disposal of the dead—earth burial, water burial, cremation, mummmification, and vulture disposal—were replaced by a whole new set of practices, conditioned by the postcontact, technologically augmented Martian context. But the most significant innovation was to link these new funerary practices with the lokas, and with the process of rebirth. Previously, the disposal of a body for Buddhists had little or no connection with whether that person was understood to have achieved enlightenment during the bardo or had rather been drawn back into one of the lokas of saṃsāra. But in Mangalayana Buddhism, rebirth into each of the lokas was interpreted in ways that were empirical and physical, and that also linked the spiritual journey of the individual with the evolution of worlds.

This change was justified by reference to the doctrine of the kalpas (eons) and the decline of the Dharma (the teaching of the Buddha). Tradition stated that each "bright" mahakalpa has its own Buddha, who reintroduces the Dharma to the world and restores the possibility of liberation; but as each kalpa progresses, the process not only of liberation but also of rebirth within saṃsāra could take different forms. In the time of transition to the Suryamandalan period, during the time of waiting for the appearance of the next Buddha, new Mangalayana funerary practices were seen as necessary to keep open the doors of liberation and also of rebirth itself. It is easiest to explain the new eon's loka-focused system of funerary practices by starting with rebirth into Deva-gati and...
Manusya-gati, the realms of gods and hnau respectively, which now occurred through the technological transfer of consciousness. Mangalayana orthodoxy insisted that the activation in digital space of a mindclone, and the deletion of the physical body through cremation, was not the achievement of nirvāṇa but simply a form of rebirth within samsāra, the world of illusion and suffering. Rebirth into the realm of hnau was also understood technologically; however, because the technology of downloading a mindclone back into biological meatspace was not to be developed until the early twenty-second century CE, for some decades static mindshots of those destined for human rebirth were simply kept unactivated in storage. The development of neural printing in the 2130s thus not only reopened the door for those in other lokas such as Deva-gati to be reborn as humans, but also for humans to be reborn as other humans, or indeed as other hnau whose neural networks could successfully be mapped and printed.

The remaining four lokas were understood as forms of existence in which enlightenment was not possible without first achieving rebirth into the realm of hnau or devas. Rebirth into Tiryagyoni-gati or Asura-gati involved being made to serve the emerging Martian society and economy. If the lama officiating at a death determined that the individual had not achieved liberation but had been drawn into Tiryagyoni-gati, the realm of animal life, then his or her mindless body would be reanimated and recruited into the army of subhumans used in the vast linear mines to extract precious ores from volcanic dikes, or set loose to run wild in the biopark of Valles Marineris. By contrast, those born into Asura-gati, the machine realm, had their lifeless bodies turned into implements to be used in mines, workshops, or domestic settings. Rebirth into the final two lokas, Naraka-gati and Preta-gati, involved participation in the wider becoming of the planet. If an individual was to be reborn into Naraka-gati, the mineral realm, their body would be stripped of flesh and the skeleton buried in the wall of one of the many ancient troughs or fossae around the edge of Tharsis that had been produced by the formation and sheer weight of the great plateau. Thus, despite not having achieved liberation by entering into the deep time of the planet, individuals could still enter into the mineral being of Mars by becoming its first fossils and thereby contributing to the future legibility of its evolving body. If, on the other hand, it was determined that they had been drawn into Preta-gati, the vegetable realm, their corpses were buried intact in the regolith, the fine material that covers the Martian plains, so that their vitality could be absorbed into the developing soil of Mars. In the case of rebirth into all of these last four lokas, mindshots were taken at the moment before death, and nanosensors used to record the sensations undergone by the body in its new loka, so that the individuals did not lose the possibility of rebirth into a different loka, of learning from this incarnation, and ultimately of enlightenment.

It was through the dramatic changes outlined above, changes in which Bardo Thodol was central, that Buddhism became the first religion from Earth to embrace fully the implications of postplanetary and postcontact existence, and the scientific and spiritual advances offered by the Common Culture. And yet, even regarded from within the terms of the Mangalayana Buddhist worldview, there are signs that far greater changes must lie ahead. To invoke the traditional representation of the six lokas as arranged in the “wheel of existence” (sridpa’i khorlo) that is turned by Yama, the Lord of Impermanence, the wheel seems to be turning. The realms of hnau and devas are currently at the top, signifying that the possibility of enlightenment lies in those lokas. But will this change? When the Dharma is renewed in future kalpas, might the possibility
Already well established in his painting and drawing practice, Paul Klee’s seminar of 1920–21 at the Bauhaus served as the test site for his “theory of line.” The seminar exists as lecture notes, the introduction to which is reproduced here in the first half of the excerpt. Klee would develop his proposals over the course of the academic year, resulting in a compact manual published in 1925 as the Pedagogical Sketchbook.

Empowered by vitalist, sensual forces of a world undergoing constant motion, flow, and vibration, Klee’s line is simply a point in dynamis: it goes for a walk, meets other lines, interacts, things happen, and a whole world of shape-forming forces, textures, and sounds emerges. The second excerpt charts the physical and aesthetic genesis and constant evolution of form, a whole kinematics that builds the cosmogrammatic basis for what Klee would call bildnerisches Denken.

The author would like to thank Brian Black, Nigel Clark, John Carter McKnight, Douglas Osto and Kim Stanley Robinson for their fact-checking and fantasy-checking, and Judith Forshaw for her deft copyediting.

Editorial Note: The “Commission’s surprising negative response” mentioned on page 150 can be found in the forthcoming publication: Clive Hamilton, François Gemenne, Christophe Bonneuil (eds.), The Anthropocene and the Global Environmental Crisis, to be published by Routledge in 2015.

Erich Hörl
Variations on Klee’s Cosmographic Method