Narratives of Embryology: Becoming Human in Tibetan Literature

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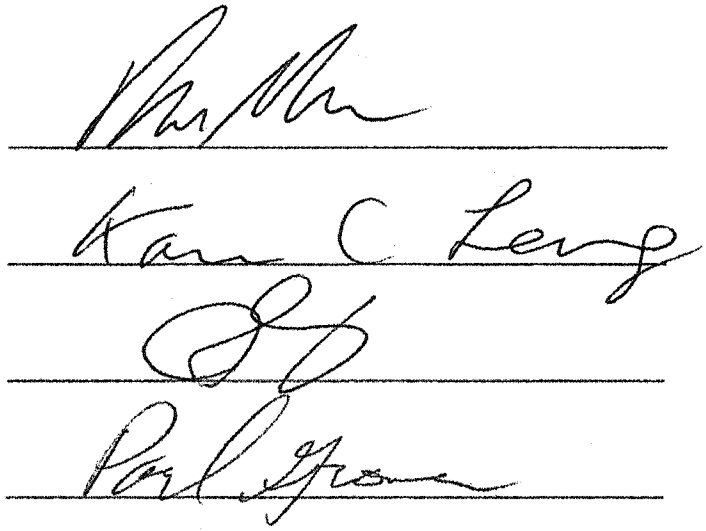

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ABSTRACT

This dissertation focuses on embryology as it begins to appear in Tibetan texts from the eleventh century, and on what embryology tells us about the relationship between medicine and religion in Tibet. This research examines connections between models of human generation in Tibetan literature and issues of importance in Buddhist religious thought and practice. Spanning many centuries and a wide range of literary genres, writing on embryology is found across all sectarian classifications of Tibetan religion. Accounts in religious texts are generally different in both structure and content than those found in medical texts, and they differ widely from each other as well. In this work I argue that Tibetan embryology is not most productively approached as a topic of "science" or "medicine" in the way that these disciplines have traditionally been understood in Euro-American thought. Rather, embryology—that is, discussions found in Tibetan medical and religious texts that focus on the development of the human body from conception to birth—may be most fruitfully read as narrative. The embryological narrative may thus be seen as a tool used by Tibetan medical writers not so much to describe what is, but to *pre*scribe what should be, in the effort to articulate acceptable models of identity, continuity, and change.

As I assess the significance of embryology across medical and religious literature, questions of cultural transmission and adaptation also surface. As they wrote, how did Tibetans determine when originality was acceptable, and when adherence to tradition was required? What authorities guided Tibetan scholars when they wrote about the human body? Aiming to develop our understanding of how the disciplines of religion and medicine were distinguished in Tibetan literature, this project makes a methodological statement relevant to

both the study of Tibetan religion and the study of Tibetan medicine as these are conducted today.

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I would like to acknowledge Helen King for graciously allowing me to derive part of this dissertation's title from that of her article, "Making a Man: Becoming Human in Early Greek Medicine," in G. R. Dunstan, ed., *The Human Embryo, Aristotle and the Arabic and European Traditions* (Exeter: University of Exeter Press, 1990). Illustrations of the Tibetan medical painting on embryology are printed here from photographs taken with the permission of the Medical History Museum at the Factory of Tibetan Medicine in Lhasa.

The largest debts of gratitude are owed to my parents, for their unfailing generosity, to Travis, for his affection, and to Sivert, for getting me interested in embryos in the first place.

CHAPTER 1. READING RELIGION AND MEDICINE IN TIBET

Embryological theories had a profound influence on the history of ideas in Europe, an influence that was felt in circles far beyond that of biologists and medical researchers. In the seventeenth and eighteenth centuries, the question of how the fetus developed was one of the most contentious issues in embryology. Some embryologists favored a theory called epigenesis; others propounded a theory of preformation. In epigenesis, development of the human form within the womb was sequential, or cumulative. Conceptual difficulties in this view were centered around the problem of differentiation: what could be the stimulus that would convert nothing into something? The early Greek philosopher-scientist's position that there could be "no coming-into-being from non-existence" was not easy to dispute. This issue caused many European embryologists of the late seventeenth- and early eighteenth-centuries to reject epigenesis in favor of preformation. In preformation, a tiny form of the human body was believed to exist from the very beginning of development; some preformationists even claimed they could see tiny human forms in ova or sperm. Conceptual troubles with this hypothesis, however, led to two schools of thought: the ovists, who placed the homunculus in ova, and the spermists who placed it in sperm. Problems didn't end there—if the homunculus was contained in the egg, then each homunculus must have another homunculus, in an infinite regression, suggesting that in fact the entire human race was included in the ovaries of Eve.[1]

[1] This topic is skillfully covered in Clara Pinto-Correia, *The Ovary of Eve: Egg and Sperm and Preformation* (Chicago: University of Chicago Press, 1997). Also see Norman Ford, *When Did I Begin? Conception of the Human Individual in History, Philosophy and Science* (Cambridge University Press, 1988).

This debate cast its influence widely across European intellectual thought, art theory, and literature. As an example, eighteenth-century Europe saw a radically new orientation of thought that brought about a change from a mimetic theory of art to an organic theory of art. Critics who searched widely for the origins of this transformation were led to focus on the importance of embryological research of a century earlier. Parallels had begun to be drawn between the production of a work of art and the conception and development of a living organism, such that organic imagery described the artist's creativity. Metaphors that drew on the processes of conception and fetal development took part in a realm of implications concerned with that which is naturally conceived and developed. Rather than being "manufactured" from "artificially" conjoined substances and by means of strenuous effort in a "fight against nature," the fruit borne by a means modeled after human conception and development bears quite different implications.[2]

In fact, the influence of embryology on intellectual life in Europe stretches back many centuries. In twelfth-century Europe, for example, theologians used the anatomy and physiology of the body as proofs for divine perfection and intelligence. Historian of religion and medicine Joseph Ziegler writes,

> [H]umoral theory and theories of generation and embryology were three fields which were extensively used by theologians as sources of arguments and analogies in a variety of scholastic debates. Medical knowledge in general and knowledge about the radical humor in particular was essential when discussing generation, the transmission of original sin, the

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[2] R. Dix, "Organic Theories of Art: The Importance of Embryology," *Notes and Queries* (1985): 215. On the organic theory of art and its relation to European philosophical thought, also see John Zammito, *The Genesis of Kant's Critique of Judgement* (Chicago: Chicago University Press, 1992).

> aging process, prolongation of life, death, resurrection and immortality.[3]

Earlier still, embryology proved an influential, though controversial, topic for the philosophers of ancient Greece. Plato considered the embryo to be an animal, Hippocrates called it a plant, and Aristotle explained that in the process of gestation it began as a plant and later grew into an animal. Emerging Christian thinkers subsequently rejected the thought that the embryo could be a plant, since, of course, plants have no souls. Throughout the history of European and Islamic intellectual history, the study of the embryo has been intertwined with religion, ethics, and natural science.[4]

In this dissertation, it is my contention that the history of embryology and its role in Tibetan literary traditions is similarly influential. Discussion of the embryo in Tibetan literature was not restricted to an isolated group of medical traditions; in fact, the power of embryological symbolism held sway far beyond Tibet, across the Buddhist world.

I. Issues in Indian embryology

In the Āyurvedic classic *Caraka saṃhitā*, the chief medical theoretician Punarvasu Atreya speaks these words to an assembly of philosophers:

> Do not let yourselves become embroiled in complex arguments and counter-arguments nor let yourselves pretend that truth is obvious and easy to attain if one adheres to a single philosophical position... Free yourselves from simple biases and search for the truth

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[3] Joseph Ziegler, *Medicine and Religion c. 1300, The Case of Arnau de Vilanova* (Oxford: Clarendon Press, 1998), 171.

[4] Richard Sorabji, "Foreword," in *The Human Embryo: Aristotle and the Arabic and European Traditions*, ed. G. R. Dunstan (Exeter: University of Exeter Press, 1990), ix.

dispassionately.[5]

Although the *Caraka saṃhitā* is one of the most influential medial treatises in South Asia, in the following chapters we will see that Punarvasu's advice was rarely heeded. The *Caraka* is generally said to date from the fourth or third century BCE, but it appears to have been stabilized in the form now extant in the first few centuries of the Common Era.[6] During the same time period, many of the primary issues in Indian philosophy were also being debated, including, among other topics, the problem of selfhood, the problem of rebirth and karma, and the problem of freedom and bondage.[7] The question of how the human being develops was an issue of debate among Indian philosophers. Although in much of the modern world embryological details are now scientific questions, in the ancient Indian context, details such as these were often quite centrally religious or philosophical issues.

In early Indian literature, the development of the human body in the womb is described as a progressive layering of material elements. In *A Critical Appraisal of Āyurvedic Material in Buddhist Literature*, Jyotir Mitra summarizes the classical Āyurvedic tradition represented by the *Caraka saṃhitā* and *Suśruta saṃhitā*, two of the most influential Āyurvedic treatises:

> In the first month, the fetus has a jelly-like form (*kalala*). In the second month the five *mahɔbhūtas* fuse together and by action of the *kapha, pitta* and *vāta* it becomes more solid

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[5] From Gerald Larson, "The Concept of Body in Āyurveda and the Hindu Philosophical Systems," in *Self as Body in Asian Theory and Practice*, ed. Roger Ames Thomas P. Kasulis, Wimal Dissanayake (Albany: State University of New York Press, 1993), 110. (*Caraka* 1.25.) Translation by Gerald Larson.

[6] I refer primarily to an English translation of this text and its eleventh-century CE commentary, the *Āyurveda Dipikā* of Cakrapāṇi Datta. *Agniveśa's Caraka saṃhitā*, trans. Ram Karan Sharma and Vaidya Bhagwan Dash, 2 vols. (Varanasi: Chowkhamba Sanskrit Series Office, 1976).

[7] Gerald Larson, "Saṃkhya, A Dualist Tradition in Indian Philosophy," in *Encyclopedia of Indian Philosophies*, ed. Gerald James Larson and Ram Shankar Bhattacharya (Princeton: Princeton University Press, 1987), 12.

(*ghana*). The mass becomes a compact ball (*piṇḍa*) if the embryo is male. It is molded or elliptical like a *peśī* if the embryo is to be a female; if it is a hermaphrodite it is like the half of a solid sphere (*arbuda*). In the third month, five bud-like protrusions, representing the rudimentary head and limbs are formed. Other major and subsidiary parts of the body are also indistinctly seen. In this month, also appear the eleven *indriyas* and all the structures of the body. In the fourth month, all organs become more distinct. The heart is now ready to perform all vital functions, the fetus, therefore, exhibits a desire for various objects, which express themselves as "longing" (*dauhūda*) by the pregnant woman. In the fifth month, further development of the powers of the mind takes place; according to Caraka, only the fleshy and muscular parts grow. In the sixth month, according to Suśruta, feelings, i.e. powers of perceiving and distinguishing pain and pleasure are evident. Caraka says that accumulation of strength occurs and complexion to the skin is now imparted. In the seventh month, further developments occur in the primary and secondary organs. The fetus is now endowed with complete physical structures. In the eighth month, the vital element (*ojas*) which begins to take a firm hold of the body is itself still unstable. The child if born now dies, because of want of *ojas* and the menace of evil spirits. In the ninth or tenth month, sometimes in the eleventh or twelfth month, a live child may be born; if born at other times it contracts diseases.[8]

Many, if not most, South Asian embryological accounts are similarly structured, recording

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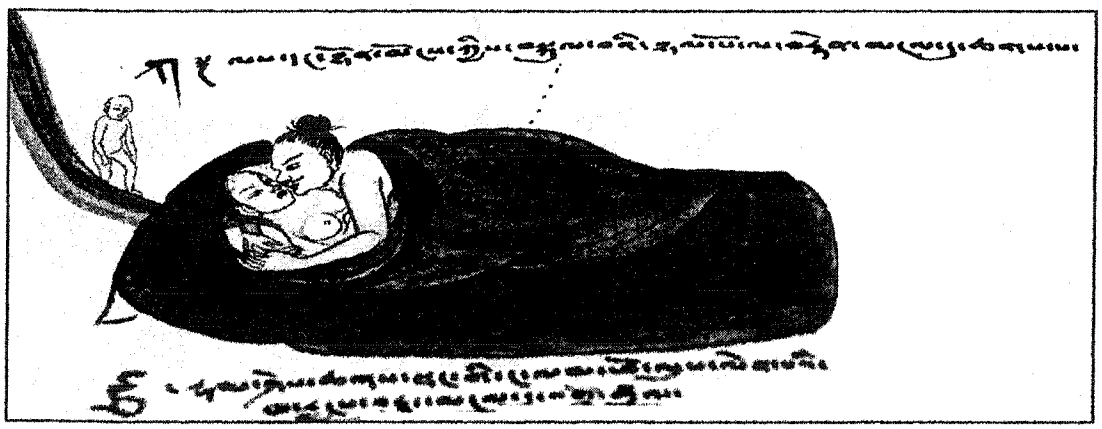
[8] Jyotir Mitra, *A Critical Appraisal of Ayurvedic Material in Buddhist Literature* (Varanasi: The Jyotiralok Prakashan, 1985), 296. For a survey of various conflicting views, also see *Caraka saṃhitā*, trans. A. Chandra Kaviratna and P. Sharma, 2 ed., Indian Medical Science Series No. 42, vol. 2 (Delhi: Sri Satguru Publications, 1996), 496-497; Surendranath Dasgupta, *A History of Indian Philosophy*, 5 vols. (New Delhi: Motilal Banarsidass, 1975), Volume 2, 302-319; Bhagwan Dash, *Embryology and Maternity in Ayurveda* (New Delhi: Delhi Diary, 1975); P. Kutumbiah, *Ancient Indian Medicine* (Calcutta: Orient Longmans Ltd., 1962), 2-6; Alex Wayman, "The Intermediate-State Dispute in Buddhism," in *Buddhist Studies in Honour of I. B. Horner* (Dordrecht: D. Reidel, 1974).

primarily which parts of the embryo develop, in what order. There is, however, much divergence of opinion among Indian writers about the sequence of development. Debates over the embryo's developmental sequence were not held among physicians only, but were spread across the range of Indian scholasticism. With elaborate rationalization, some said the head appears first (because it is the seat of the senses), while others prioritized the heart (as the seat of consciousness), the navel (as the place where food is stored), the intestines (as the seat of air), or the hands and feet (as the principal organs). Some argued—like the preformationists centuries later in Europe—that all parts of the body are perfectly differentiated from the moment of conception, and that they simply grow larger during gestation.[9] In the chapters to follow, we will see that for Tibetan writers, although the divergence of opinion on the issue of sequence of development is less radical than for their Indian predecessors, the question of how the body grows is still debated. These debates will suggest interesting interpretations of the role of embryology in Tibet.



In the Tibetan medical painting, the consciousness is shown entering the parental union.

The question of when consciousness emerged was also disputed in Indian literature.

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[9] Dasgupta, *History of Indian Philosophy*, Volume 2, 316.

Classical Āyurvedic accounts such as that of *Caraka* imply that it is active right from the moment of conception, while other traditions suggest that it appears only later in fetal development: in the *Garbha Upaniṣad* a soul comes to the embryo after a gestation of seven months, and Purāṇic texts locate the time of consciousness entering the fetus in the seventh to ninth month.[10] In many traditions of South Asian embryology, including some Tibetan traditions, as we will see, the fetus is said to have conscious experiences, at least toward the end of its stay in the womb, experiencing feelings of suffering, memories of past lives, and even sentiments of religious devotion.

These debates were not limited to Hindu philosophical and medical schools of thought. Pāli Buddhist works such as the *Saṃyuttanikāya, Jātaka, Milindapañho,* and *Visudhimagga* also included accounts of fetal development, although, as elsewhere, the details presented in those texts vary widely. J. R. Haldar, in his *Medical Science in Pāli Literature,* discusses Pāli versions of the developmental process:

> The *Saṃyuttanikāya* and *Niddesa* speak of five successive stages of development in fetal formation—*kalala, abbuda, pesi, ghana* and *pasākha.* The *Visuddhimagga* mentions only the first four stages by name and the next stages by month. The said *Nikāya* states that as soon as the *pasākha* rises from *ghana, kesā* (head-hairs), *loma* (body hairs) and *nakhāni* (nails) appear. The *Saṃyuttanikāya Commentary* says that at first *kalala* appears in the form of a drop of oil.

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[10] Minoru Hara, "A Note on the Buddha's Birth Story," in *Indianisme et bouddisme: melanges offerts a Mgr Etienne Lamotte* (Louvain-la-Neuve: Universite catholique de Louvain, Institut orientaliste, 1980), 154, ff. 49; Lakshmi Kapani, "Upanisad of the Embryo and Notes on the Garbha-Upanisad," in *Fragments for a History of the Human Body,* ed. Michael Feher (Urzone, Inc., 1989). For references to secondary literature on this text, see Hara, "A Note on the Buddha's Birth Story," 151, ff. 37. For additional Vedic references to the process of human birth, also see P. Rolland, "Un fragment medical vedique; Le premier khaṇḍa du Vārāhapariśiṣṭa bhūtotpatti," *Munchener Studien zur Sprachwissenschafi* 30 (1972). On Jain embryology, see C. Caillat, "Sur les doctrines medicales dans le Tandulavcyāliya," *Indologica Taurenesia* 2 (1975).

> After the lapse of seven days *kalala* becomes *abbuda* and takes the color of water after it is used for washing flesh. When *abbula* passes seven days, *pesī* or a piece of flesh rises from it and looks like refined lead. However, this *pesī* coagulates like a lump, produced from a crushed and heated bundle of black peppers, tied with a piece of cloth. After seven days of its existence, *pesī* becomes *ghana* and comes to be known as a lump of flesh looking like a hen's egg. As mentioned above, *pasākha* appears from *ghana*. The *Vinaya Piṭaka* says that *pasākha* is the lower part of the body. According to the *Saṃyutta Commentary*, when an embryo comes to an age of five weeks, five parts of the body, i.e., two hands, two feet and one head, appear from the *ghana*. The said *Commentary* says that the embryo becomes mature when it passes 154 days. It also says that an embryo is bound with the mucus membrane of the mother's stomach by a hallow stalk rising from the embryo.[11]

Haldar thus explains that some texts—*Saṃyuttanikāya* and *Niddesa*—describe five developmental stages, using terms we will later see repeated in Tibetan translation, while others, such as the *Visuddhimagga*, use the same terms to describe only four initial stages. Indeed, Asanga's *Yogacharyābhūmi* offers yet another arrangement of the stages.[12] Haldar notes other differences between the *Saṃyuttanikāya* and the *Vinaya* embryologies: whereas the former uses the term *pasākha* to describe the fifth stage of embryonic development, the latter uses the same term to refer to the embryo's lower body. Many of these Buddhist texts were well known to Tibetans as they began their own embryological traditions—how did they resolve these differences? Or did they? If they did not, what could this tell us about how

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[11] J.R. Haldar, *Medical Science in Pali Literature* (Calcutta: Indian Museum, 1977), 29. This discrepancy is also mentioned in Jeffrey Hopkins and Lati Rinpoche, *Death, Intermediate State and Rebirth in Tibetan Buddhism* (Ithaca: Snow Lion Publications, 1979), 62. Other related controversies on the stages of development as they exist in Tibetan literature will be addressed in later chapters.

[12] Cited in Hopkins and Rinpoche, *Death, Intermediate State and Rebirth*, 62.

to interpret embryology as a topic of intellectual discussion?

Sequence of development was but one of many issues central to the study of embryogeny that were of concern not only to biologists (to the extent that such a discipline can be said to exist in early India), but to philosophers and religious thinkers too. In the context of embryology Indian philosophers discussed the causes of the formation and development of the fetus, and they questioned the precise roles of the natural elements, the soul (Skt. *ātman*), and the mind (Skt. *manas*). Other philosophical and soteriological issues that were addressed in early Indian embryological theory include the question of how transmigration occurred and what role was played by karma. In the course of thinking about the process of transmigration, Indian philosophers were confronted with the problem of the subtle body: what exactly was it that transmigrated? Dasgupta explains that in the Sāṃkhya view, the subtle body, necessary as the physical support of an individual's *buddhi* during the interval between death and rebirth, traveled from life to life, becoming associated with the *buddhi* "like an odor is attached to a cloth," until the *buddhi* disassociated from it by attaining true knowledge. The medical treatise *Caraka* refers to a non-physical factor that connects the soul with the body; the Āyurvedic classic *Suśruta saṃhitā* also refers to a being that, urged by karma, enters the womb for rebirth. By contrast, according to the Buddhist Vaiśeṣika philosophers, who do not posit a subtle body, the influence of uterine heat works on the combination of parental contributions, producing successive degeneration and regeneration until a fetal body develops. The mind, which requires a supporting body, can then enter the fetus later in gestation. The Nyāya discussed this issue as well, also rejecting the existence of a subtle body and positing an "all-pervading" soul that takes its place in the

new fetus.[13]

The question of whether the intermediate being has a body—and what that might mean—was clearly a topic of contention. Among the so-called Eighteen Schools of early Buddhism, O. Wijesekara comments that Sammatīyas, Pubbaseliyas, Sarvāstivādins and Vaibhāṣikas affirmed the necessity of a corporeal being, while Mahāsāṇghikas, Ekavyavahārikas, Kukkuṭikas, and Lokottaravādins did not.[14] Also debated was what exactly this being should be called. For many Buddhists terminology that might have derived from *ātman* theories of early brahminism, implying a permanent and unchanging being, was unacceptable. Some Indian Buddhists settled on the term *vijñāna* to denote the transmigrating factor. In an article dealing with Vedic influences on the meaning of the Pāli term, *gandhabba,* Wijesekara reports the *Dīgha Nikāya* to "assert that 'if *vijñāna* were not to descend (*okkamissatha*) into the mother's womb (*mātu kucchim*)' or if 'having descended into the mother's womb were to leave (*akkamitvā vokkamissatha*),' then parturition will not be successful."[15] Consideration of a third factor in conception is also addressed by Wijesekara. He points out that the *Mahāṭanhāsaṇkhaya Sutta* of the *Majjhima Nikāya* states that the presence of the *gandhabba* is required for conception to take place, and he notes that Buddhaghosa clearly states that this reference to *gandhabba* is to a being about to enter the womb. McDermott explains that this ought not be understood as supporting the existence of an intermediate-state being, for Theravādins were opposed to this position. Instead, they proposed a "rebirth-linking consciousness" (Skt. *paṭisandhi viññāna*) that arises newly at the

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[13] Dasgupta, *History of Indian Philosophy,* 2: 305-312.
[14] O. Wijesekara, "Vedic Gandharva and Pali Gandhabba," *University of Ceylon Review* 1 (1945): 89-90.
[15] Ibid.: 92.

moment of conception, linked causally to the previous lifetime "like a sound and its echo," according to Buddhaghosa.[16]

Inherent in debates over the mechanics of transmigration is also the question of the role of karma—or other causal forces—in propelling a being to a particular womb. Contemporary scholars theorize that early brahminical thinking classified karma largely in the realm of sacrificial rituals, which were thus ultimately responsible for creating a new being.[17] Only with a later "ethicization" of karma, where the quality of a new life was directly determined by the quality of previous actions, did the doctrine of karma come to encompass *all* actions. Steven Collins explains that, "If one's entire life is a sacrificial performance, then every action will have the results which sacrificial performance has—that is, every act will have its effect on the next life."[18] He attributes much of the responsibility for this transformation, a radical move that led to "the internalization of the sacrifice in the life of the renouncer," to the doctrine's interaction with Buddhism.

According to the Āyurvedic classic *Caraka*, the union of male semen and female "blood" only produces a fetus when "the *ātman* with its subtle body, constituted of air, fire, water, and earth, and *manas*..., becomes connected with it by means of its karma."[19] The

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[16] James P. McDermott, "Karma and Rebirth in Early Buddhism," in *Karma and Rebirth in Classical Indian Traditions*, ed. Wendy Doniger (Delhi: Motilal Banarsidass Publishers, 1983), 169-171. On related debates in early Indian Buddhist literature, also see Mathieu Boisvert, "Conception and Intrauterine Life in the Pali Canon," *Studies in Religion* 29, no. 3 (2000); David J. Kalupahana, *Causality: The Central Philosophy of Buddhism* (Honolulu: The University Press of Hawaii, 1975), 115-121; Wayman, "The Intermediate-State Dispute in Buddhism," 227-237. An interesting discussion of medieval Indian Buddhist notions of karma's role in rebirth can be found in Bruce Matthews, "Post-Classical Developments in the Concepts of Karma and Rebirth in Theravada Buddhism," in *Karma & Rebirth: Post-Classical Developments*, ed. Ronald W. Neufeldt, SUNY Series in Religious Studies (Albany: State University of New York Press, 1986).

[17] Steven Collins, *Selfless Persons* (Cambridge: Cambridge University Press, 1982), 57.

[18] Ibid.

[19] Dasgupta, *History of Indian Philosophy*, 2:302.

early Indian Buddhist thinker Vasubhandu likewise explains that the *gandhabba*, about to enter the womb, is impelled by karma to do so.[20] We will see in the following chapters that in later Buddhist texts karma is said to empower the winds that create the embryo during gestation and then expel the fetus from the womb. Still later, in Indian tantric texts, karma is responsible for bringing together the first circulatory channels of the fetus' psycho-physical subtle body. Karma is said by some to determine the sex of the child during gestation. Despite this, many texts prescribe rituals, to be performed early in development, that will overpower this karmic action in the fetus, thereby ensuring the birth of a boy child. Significantly, the presence of such rites confirms the thesis that for the Hindu and Buddhist medical traditions stemming from *Caraka*, karma is not an immutable force, but rather something that can be affected by human actions. I will return to this issue in chapter five.

In early Indian medicine, Āyurvedic practices of sequestering a patient in a cave were prescribed in order to restore a lost equilibrium between the body and the universe. Āyurvedic theory claimed that in the womb the human being experienced a perfect balance of the humors—exposure to the outside world and its fluctuating climate of elements was said to throw this balance off, ill-health requiring therefore a return to a figurative "womb." This medical treatment was applied also to spiritual imbalances: religious initiation practices (Skt. *dikśa*) call for sequestering the initiate in a closed hut, from which he or she is subsequently "reborn."[21] As David White points out, initiation into a religious order in this manner thus "biologically" links members of the order to each other, as all are reborn of the

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[20] Mitchell G. Weiss, "Caraka Saṃhitā on the Doctrine of Karma," in *Karma and Rebirth in Classical Indian Traditions*, ed. Wendy Doniger O'Flaherty (Berkeley: University of California Press, 1980), 170-172.
[21] David Gordon White, *The Alchemical Body: Siddha Traditions in Medieval India* (Chicago: University of Chicago Press, 1996), 27.

same womb.[22] Indeed, as far back as the Vedic Brāhmaṇas, sacrificial rites prescribe an isolation of the sacrificer in preparation for his ritual rebirth. We will see in chapter four that detailed religious contemplative practices modeled after the processes of human conception, development, and birth are present in a wide range of Tibetan Buddhist tantric works, derived from these ancient Indian traditions. In tantric traditions, procreative metaphors are brought to the fore. The study of embryogenical development provides the yogi with an accurate description of the erroneous developmental path of an ordinary being, and this knowledge is the key to learning to repeat this process without committing such error. The womb symbolizes an ultimate enlightened space in tantric Buddhism, although, as we will see, this glorification of female anatomy and physiology has little to do with real women.

II. *Cultural transmission and adaptation in Tibet*

In the varieties of indigenously Tibetan embryological literature, while there may be fewer areas of divergence than there are between the numerous traditions found in Indian literature, there is nonetheless a remarkable array of contentious topics. All Tibetan traditions known today agree that conception occurs upon the confluence of three conditions: the two types of healthy reproductive fluid from a copulating man and woman, and a consciousness in the postmortem state awaiting rebirth. When the consciousness finds such an appropriate womb, some traditions claim that it takes hold there by means of the three "destructive emotions" (*nyon mongs;* Skt. *kleśa*), attachment, anger, and delusion. Some texts contend that the transmigrating consciousness experiences attraction to one parent and

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[22] Ibid., 101.

anger toward the other, and due to these emotions the postmortem period ceases and a new being is conceived. At this moment, by some accounts, an ordinary transmigrating being loses awareness and merges into the mixture of blood and semen. (This view may be contrasted to the Buddhist Vaiśeṣika position mentioned above, in which the transmigrating mind and its subtle body did not influence the initial development of the embryonic body at all.) Following conception, full embryological descriptions detail thirty-seven to forty weeks of development, with daily, weekly, or monthly records of the process of the psycho-physical body's growth. A number of questions are debated in Tibetan medical literature on embryology. How precisely does the consciousness enter the mother's womb? What exactly is the role of the transmigrating being's karma throughout the process of gestation? Which are the primary energy forces responsible for directing fetal growth? What is the exact sequence of development of the fetus in the womb? Many of the issues discussed are rooted in complex philosophical problems that can also be found debated in other contexts in Buddhist religious and philosophical texts. The chapters to follow will address some of the contested issues found in Tibetan literature on embryology and consider their place in the wider context of Tibetan religious, philosophical, and medical literature.

This dissertation focuses on embryology as it begins to appear in Tibetan texts from the eleventh and twelfth centuries. This includes works authored by Tibetans from this period onwards, works translated into Tibetan from other languages, and works from previous centuries that continued to hold great importance. The centuries preceding these witnessed the breakup of a Tibetan empire that spanned Central Asia over a period of several centuries, the persecution of certain forms of Buddhist culture and scholasticism, and a

dramatic range of other social, political, and economic transformations across Tibet and its surrounding regions. Following these upheavals, a new transmission of Buddhist texts and other forms of intellectual culture arrived in Tibet from India and neighboring regions, and Tibetans themselves began anew to produce a wide variety of literary materials. Over the next several centuries, major monastic centers were transformed into centers for the production, circulation, and transmission of scholastic knowledge of various types, including medical knowledge. The concentration of physicians in monastic or other religious centers, the high political position of physicians, and their increasing role as cultural agents in the following centuries point to an important relationship between the religious hierarchy and medical scholars and practitioners of various types.

It is clear that embryology was an important theoretical topic throughout the history of Indian literature. Many of these conflicting views were known to Tibetans of the eleventh and twelfth centuries. During this period vast amounts of literature poured across the borders of Tibet. As this new transmission of Buddhist texts and other forms of intellectual culture arrived from India and neighboring regions, how did Tibetans evaluate such an eclectic mix of foreign ideas, and how did they adapt these materials to meet their own concerns? As I assess the significance of embryology across religious and medical literature in the chapters to follow, general questions of cultural transmission and adaptation will also surface. As they wrote, how did Tibetans determine when originality was acceptable, and when adherence to tradition was required? Intellectual controversy in eleventh-century Tibet was characterized by a concern to uphold India as the ideal authorizing source. Tibetan scholars at this time possessed numerous sources with which they could easily have

maintained this link to India, and yet in embryology this link was broken, as certain embryological concerns—vitally important issues for Indian scholars of all types—were rendered invisible and other concerns emerged as significant. During this tremendously formative period in intellectual history, Tibetans categorized objects of scholarship: whereas some topics required an external legitimating authority, with other topics, Tibetans themselves could exercise individual discretion. During this process, the future of Tibetan embryology, and Tibetan medicine, was determined.

III. The intertwining and untwining of medicine and religion

According to Kenneth Zysk, the earliest Indian medical knowledge was part of an ascetic religious movement, a portion of which became known as Buddhism.[23] Much of the medical knowledge of early Buddhist monasteries was presented in the *Vinaya* chapters of the *Mahāvagga.* Studied as one of the five sciences in the major monasteries, medical knowledge was accepted as a central soteriological tool. In Mahāyāna Buddhism, the obligation to heal the sick was stipulated in disciplinary codes, and the followers of the *bodhisattva* path were said to be able to heal both spiritual and physical afflictions. It was thus explicitly understood that the healing of the body permitted the calming of the mind and the cultivation of awakening. Indeed, the organization of Buddhist teachings is often said to follow a medical paradigm: the four noble truths are likened to medical diagnosis, the Buddha is likened to a physician. As a religion where soteriology is defined as relief from suffering, indeed it is not

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[23] Kenneth Zysk, *Asceticism and Healing in Ancient India* (New York: Oxford University Press, 1991). On the issue of whether medicine was practices by monks in early Indian Buddhist monasteries, see Wetara Mahinda, "Medical Practices of Buddhist Monks: a Historical Analysis of Attitudes and Problems," in *Recent Researches in Buddhist Studies: Essays in Honour of Professor Y. Karunadasa,* ed. Kuala Lumpur Dhammajoti, Asanga Tilakaratne, and Kapila Abhayawansa (Columbo: Y. Karunadasa Felicitation Committee, 1997).

surprising that it should find in medicine a reservoir of concepts and terminology. Developing alongside the Buddhist monasteries and supporting communities in India, medical knowledge was codified in Buddhist scriptures, eventually producing monk-healers and Buddhist monastic hospices and infirmaries, and finally becoming part of the standard curriculum in monastic universities. By the time Buddhism began to spread to other parts of Asia, medical knowledge and practices of the monastery went along as integral parts of the religious system.

Despite the natural connections between medical and religious knowledge throughout the history of Buddhism, few works of Euro-American secondary scholarship exist that showcase, or even acknowledge, this relationship. Scholars of early Europe have enthusiastically researched the changing interactions between medicine and the Church, noting how the incorporation of medicine into scholastic culture affected the social status of physicians and the development of academic medicine. Joseph Ziegler, for instance, in *Medicine and Religion c. 1300,* notes an increasing divide in thirteenth-century France between the medical and religious professions. Learned medicine became less explicitly religious as Greek medical theory, which separated disease from its social and moral meanings, became more prominent. Although the interface between religion and medicine has become an object of academic interest to scholars of Christianity, the radical disjunction between religion and science dominant in early Indology survives still in most scholarly work on Indian and Tibetan religion and medicine. In the study of Indian and Tibetan religion, texts classified as medical or "scientific" are rarely consulted, and the study of these medical systems almost exclusively consists of straightforward descriptions of medical theory, often

with the practical aim of identifying medical healing techniques.[24] Such presentations are typically colored by the desire to prove it a "secular" and "empirically objective" science.[25] Translations from classical Sanskrit of seminal Āyurvedic treatises, such as the *Caraka-saṃhitā,* are routinely purged of "mythological" or "superstitious" elements that might lend doubt to the scientific authority of the system as a whole. This is unfortunate, for such omissions obscure portions of the texts that promise radical implications for the interpretation and presentation of knowledge in general in the ancient world.

Among scholars of Indian medicine, Francis Zimmermann stands out in his efforts to depict Āyurvedic doctrines as part of a larger ideological discourse. In *The Jungle and the Aroma of Meats,* Zimmermann's examination of Āyurvedic texts uncovers a subordination of empirical fact to the blueprints of classical thought such that he is able to work "backwards" from written words to biogeographical spaces in the ancient Indian landscape.[26] Nature, then, as the ostensible *object* of Āyurvedic schematization, is not simply objectifiably "out there"; it is rather a *creation* of such schematization itself. Zimmermann explains that this is also evident in medical texts where traditional knowledge, beyond the limited powers of

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[24] As examples of the descriptive approach, see Terry Clifford, *Tibetan Buddhist Medicine and Psychiatry: The Diamond Healing* (Delhi: Motilal Banarsidass, 1984); Todd Fenner, "The Origin of the rGyud bzhi: A Tibetan Medical Tantra," in *Tibetan Literature: Studies in Genre,* ed. Jose Ignacio Cabezon and Robert R. Jackson (Ithaca: Snow Lion Publications, 1996); Elisabeth Finckh, *Foundations of Tibetan Medicine According to the book rGyud bzi,* trans. Frederika M. Houser (London & Dulverton: Watkins, 1975). The few available treatments of Tibetan embryology in particular have been non-comparative and unsophisticated; see, for example, Nawang Dakpa, "Certain Problems of Embryology According to the Tibetan Medical Tradition," *Bulletin of Tibetology (Gangtok, Sikkim)* Special Volume: Aspects of Classical Tibetan Medicine (1993); Yeshi Dhonden, "Embryology in Tibetan Medicine," *Tibetan Medicine* 1 (1980); K. Dhondup, ed., *Lectures on Tibetan Medicine by Lady Dr. Lobsang Dolma Khangkar* (Dharamsala: Library of Tibetan Works & Archives, 1986); Thubten Sangay, "Tibetan Traditions of Childbirth and Childcare," *Tibetan Medicine* 7 (1984).

[25] For example, see the Introduction to Priya Vrat Sharma, *History of Medicine in India, from Antiquity to 1000 A.D.* (New Delhi: Indian National Science Academy, 1992).

[26] Francis Zimmermann, *The Jungle and the Aroma of Meats* (Berkeley: University of California Press, 1987).

ordinary perception, is expressed in stereotyped formulas. These formulaic paradigms are then used to create a vision of the world and its inhabitants that pervades a variety of literary genres. Zimmermann's work demonstrates that such concepts, vocabularies, and stereotyped formulas are common to the medical, legal, and ethical works of ancient Hindu India.

Although a few authors have addressed the relationship between medicine and early Indian Buddhism—such as Zysk, Meyer, Mitra, and Kitagawa—curiously few in Tibetan Studies have undertaken a critical analysis of the interrelationship between the two disciplines.[27] There are no book-length works on Tibetan medicine with an interpretive, critical approach like that of Zimmermann. With the exception of a few articles, studies of the *Four Tantras* itself are comprised mainly of summaries of the text and partial translations.[28]

Although it is sometimes said that the practice of medicine is fully integrated with religious concerns in Tibet,[29] these two are still, to a certain extent, individual disciplines and genres of literature. Although we certainly must be aware that the boundaries of these disciplines are not what they may be in Europe or North America, still it is the case that these were, and are, considered distinct disciplines in some sense. Obtaining a clearer

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[27] Joseph Mitsuo Kitagawa, "Buddhist Medical History," in *Healing and Restoring: Health and Medicine in the World's Religious Traditions*, ed. Lawrence Sullivan (New York: Macmillan Publishing Co., 1989); Fernand Meyer, *Gso-ba rig-pa. Le Systeme Médical Tibétain* (Paris: Presses du CNRS, 1988); Mitra, *A Critical Appraisal of Ayurvedic Material in Buddhist Literature;* Zysk, *Asceticism and Healing.* For a survey of early Indian Buddhist texts that discuss medical topics, see Sharma, *History of Medicine in India,* 117-135. Unschuld has a chapter on Buddhism and medicine in India in Paul Unschuld, *Medicine in China: A History of Ideas* (Berkeley: University of California Press, 1985), 132-153.

[28] R.E. Emmerick, "Sources of the rGyud-bzhi," *Zeitschrift der Deutschen Morgenlandischen Gesellschaft (suppl. III)* 2 (1977); Ronald Eric Emmerick, "A Chapter from the Rgyud-bzhi," *Asia Major* XIX, no. 2 (1975); Ronald Eric Emmerick, "Epilepsy According to the Rgyud-bzhi," in *Studies on Indian medical history,* ed. G.J. Meulenbeld and D. Wujastyk, Groningen Oriental Studies vol. II (Groningen: 1987); Fenner, "Origin of the rGyud bzhi."; Samten G. Karmay, "Vairocana and the rgyud-bzhi," *Tibetan Medicine* (1989).

[29] Cf. Fenner, "Origin of the rGyud bzhi," 459.

understanding of just how these disciplines were understood in Tibet is one important aim of this dissertation. This project will thus make a methodological statement relevant to both the study of Tibetan religion and the study of Tibetan medicine as these are conducted today. The thematic approach of this work is designed to showcase a strategy for reading Tibetan literature that reaches across disciplinary boundaries such as "medicine" or "religion." This is not to say that we must do away altogether with these terms, but simply that we must not utilize them uncritically, and that we must keep alive to the frayed edges of their definitions. Such an approach clearly identifies medicine as a player in a far larger discourse than simply that of medicinal healing. It exposes broad hermeneutic issues that shape the relationship of science and religion in non-Euro-American societies, questioning the validity of superimposing our own epistemological taxonomies on classical Asian thought.

IV. *Reading and writing about Tibetan embryology: Caveats and approaches*

Before going any further, I will pause to make a few comments about what this dissertation will *not* be. First and foremost, this is not a comprehensive presentation of all instances of and uses of Tibetan embryology. It will soon become clear that such a goal would be unattainable, so widely spread are Tibetan embryologies across the vast expanse of Tibetan literature and practice, and so few are the sources that have survived for our examination today. Because it is methodologically more my aim to demonstrate a style of reading than to present a comprehensive analysis of the entire range of medical or religious

attitudes toward embryology, my sources are deliberately selective.[30] The results of this examination, therefore, are not intended to be—and indeed cannot be—a definitive history of Tibetan embryology, or of Tibetan medicine, that attempts to gain a complete vision of the past. Although some of my conclusions will have social and historical ramifications, this is primarily a study of the development and exchange of scholarly rhetoric within certain literate traditions; as such, I am more concerned with the historicity of *narratives* than the historicity of "reality." As Leslie Kurke expresses it in her work on ancient Greek coinage and games, the discursive structures of the texts are themselves the central "facts" under consideration. Following Kurke's approach, my methodology is therefore "more literary than historical, attuned to the texts' tropes, their rhetorical strategies, their equivocations."[31]

Second, because embryology is written about in the context of many of Buddhism's most esoteric yogic and ritual practices, a detailed analysis of those religious practices might be expected in this dissertation. In the introduction to his *Indian Esoteric Buddhism: A Social History of the Tantric Movement,* Ronald Davidson similarly anticipates his readers' desire for discussion of esoteric Buddhist practice in his book, and he refers such readers to the many excellent ritual and textual studies and translations that address Buddhist ritual, yogic, and doctrinal systems in detail.[32] I will refer my readers to these same works, and others as relevant, noting that because this is above all a study of literary expressions of human embryology, my treatment of Buddhist contemplative or ritual practices themselves is

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[30] Leslie Kurke, *Coins, Bodies, Games, and Gold: The Politics of Meaning in Archaic Greece* (Princeton: Princeton University Press, 1999), 31.
[31] Ibid., 23.
[32] Ronald M. Davidson, *Indian Esoteric Buddhism: A Social History of the Tantric Movement* (New York: Columbia University Press, 2002), 6.

necessarily superficial.

Third, I would be remiss in not stating at the outcome that there is properly no such thing as "Tibetan embryology." Embryology, along with physiology and anatomy, are sub-branches of the discipline of biology with specific definitions and histories in Euro-American thought, and they have no direct terminological or conceptual correlative in Tibetan.[33] What I am calling "embryology" in this dissertation is, in fact, referred to in Tibetan literature simply as the "formation of the body" (*lus kyi chags tshul* or *grub pa lus gnas*), a topic that typically begins with a discussion of conception and typically ends with the moment of birth. There is likewise no such thing as a dedicated "Tibetan embryologist," although I will use this designation to refer to Tibetan authors who write about the formation of the body in the womb. Indeed, in Tibetan literature there is properly no single, unambiguous term for "embryo": that which we call both the "embryo" and the "fetus" is in Tibetan literature variously referred to as the "body (*lus*) forming in the womb," as "that which resides in the womb" (*mngal gnas*), as the "womb" itself (conflating the term for womb, *mngal*, with the embryo), or simply as the "child" (*phru gu*).

Finally, in this work I will not engage in significant description or analysis of "Tibetan medicine" as a whole, nor will I comprehensively address the content of its subdisciplines, such as pharmacology (the study of *materia medica*, toxicology, and

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[33] Webster's Dictionary defines physiology primarily as the study of "the functions and activities of life or of living matter (as organs, tissues, or cells) and of the physical and chemical phenomena involved." Historians of medicine typically claim that physiology as we know it today originated with the research of William Harvey (1578-1657), although certainly the ancient Greek philosophers did discuss the functions of bodily processes. Anatomy, by contrast, is defined as the "structural makeup especially of an organism or any of its parts," and is discussed widely in ancient Greek medical literature, based for the most part on information derived from dissection of human and animal bodies. My use of these terms in this dissertation should be understood loosely, for there is no clear terminological or conceptual correlative in Tibetan.

therapeutics), nosology (the study of the classification of diseases), or etiology (the study of the causes and origins of diseases). While sophisticated studies of these topics are still much needed, there are some good works on various Tibetan medical topics.[34] As subsequent chapters will show, one central aim of this dissertation is to demonstrate that Tibetan embryology should not be viewed solely within the domain of "medicine" (whatever we may mean by that). We will see, over the course of this work, that embryology defies our expectations in various ways. Where we might anticipate essential connections with gynecology, obstetrics, or the experience of pregnancy, for example, Tibetan embryologists will leave us wondering, What are we really talking about here? The key to answering this question will lie, I believe, in the interpretive decisions we make while reading.

IV. a. Medical Epistemology and the Embryological Narrative

With these caveats in mind, I will begin this study of Tibetan embryology by suggesting that Tibetan embryologies may be most fruitfully understood through a narrative epistemology, rather than what we typically understand as scientific epistemology. The term "epistemology" is sometimes understood in an exclusively scientistic sense; that is, it often describes the belief that the foundation of knowledge rests on *facts* disclosed through observation and argument governed by rules of logical inference. The term is also more widely understood to refer simply to how things are known, focusing on methodological issues involved in the question of what facts are; it is this wider sense of the term that I mean here. Scientific epistemology has traditionally been, for most contemporary Euro-Americans,

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[34] See the bibliography at http://iris.lib.virginia.edu/tibet/collections/medicine/biblio_medicine.html, as well as Jurgen Aschoff's annotated Tibetan medicine bibliography, at http://www.uni-ulm.de/%7Ejaschoff/bibli2.htm.

grounded in what Jerome Bruner has characterized as logico-scientific rationality.[35] Logico-scientific discourse functions to demonstrate or prove a statement by linking it to other statements following the principles of formal logic. Such discourse is founded on logical empiricism, the dominant Euro-American philosophy of science until the 1970s and a model of belief about science that persists in some circles still today. According to this philosophy, "reality" exists prior to and independent of the effort to understand it or manipulate it, and it is science that most closely approaches the accurate representation of reality. As Leslie and Young note in *Paths to Asian Medical Knowledge*, "This correspondence between reality and the way science represents reality, a match guaranteed by science's epistemology, makes scientific representations not merely useful, but also true."[36] The privileging of the epistemology of modern Euro-American science affects the study of non-modern, non-Euro-American belief systems, however, as it is thereby believed that these systems alone "culturalize" reality and are thus "untrue." As discussed above, this attitude is manifest in many, if not most, Euro-American writings on Tibetan medicine.

In the last few decades, some sociologists and philosophers of science have challenged logical empiricism, its ontological privileging of scientific knowledge, and the adequacy of logico-scientific rationality. In its place some have embraced an understanding of the social and historical contingency of all types of knowledge, including scientific knowledge.

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[35] Jerome Bruner, *Actual Minds, Possible Worlds* (Cambridge: Harvard University Press, 1986).

[36] Charles Leslie and Allen Young, eds., *Paths to Asian Medical Knowledge* (Berkeley: University of California Press, 1992), 3. Also see Don Bates, ed., *Knowledge and the Scholarly Medical Traditions* (Cambridge: Cambridge University Press, 1995); Karl Figlio, "The Metaphor of Organization: An Historiographical Perspective on the Bio-Medical Sciences of the Early Nineteenth Century," *History of Science* 14 (1976); Karl Figlio, "The Historiography of Scientific Medicine: An Invitation to the Human Sciences," *Comparative Studies in Society and History* 19, no. 3 (1977).

Attention to questioning the validity of logico-scientific discourse has been enhanced also by an acceptance of "narrative rationality." In narrative discourse, principles such as phonetics, rhyme, and metaphoric connection can replace rules of formal logic in the activity of producing meaningful truths. In *Narrative Knowing and the Human Sciences,* Donald Polkinghorne explains further that narrative is particularly attuned to individual experiences and their meaning by relating them as parts to a whole, and, by noting sequence of action, narrative is sensitive to temporal dimensions of human experience.[37] Rather than relying on general laws, narrative knowing is called for in realms where knowledge is particular and rules emerge from individual instances of action, as in engineering, navigation, common law, meteorology, moral conduct, and clinical medicine.[38] As such, narrative knowing is essential to practical reason, the means by which individuals and groups makes sense of events and situations and make decisions about how best to act under those conditions. Prominent theorists like Hauerwas, MacIntyre, and Nussbaum have also called narrative knowing and expression essential to moral knowing.[39]

What I will focus on in this dissertation is the assertion that Tibetan embryology is not most productively approached as "science" or "medicine" in the way that these topics have traditionally been understood in Euro-American thought. Rather, I want to say that embryology—that is, those discussions in Tibetan texts that focus on the development of the

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[37] Donald Polkinghorne, *Narrative Knowing and the Human Sciences* (Albany: State University of New York Press, 1988), 36.

[38] Hunter, "Narrative, Literature and the Clinical Exercise of Practical Reason," *Journal of Medicine and Philosophy* 21 (1996): 304.

[39] Ibid.: 307. See D. Burrell and S. Hauerwas, "From System to Story: An Alternative Pattern for Rationality in Ethics," in *Why Narrative? Readings in Narrative Theology,* ed. S. Hauerwas and L. G. Jones (Grand Rapids, MI: Eerdmans, 1977); A. MacIntyre, *After Virtue: A Study in Moral Theory* (Notre Dame: University of Notre Dame Press, 1981); M. C. Nussbaum, *Love's Knowledge: Essays on Philosophy and Literature* (New York: Oxford University Press, 1990).

human body from conception to birth—may be most fruitfully read as narrative. Over the course of this dissertation we will see that Tibetan embryologies are narrativized to a greater or lesser extent, and we will consider why this is so, and what this adds to our understanding of Tibetan writing and interpretation during the centuries in question. We will also see how these embryologies take advantage of narrative's qualities of situated subjectivity and entanglement with time, and its role in practical reason and moral knowing.

In calling embryology "narrative" I am suggesting that it partakes of many of the attributes we normally ascribe to a story. Hayden White summarizes five such attributes, most of which can be seen to varying degrees in Tibetan embryologies: a central subject; a well-marked beginning, middle, and end; peripeteia; an identifiable narrative voice; and the suggestion of a necessary connection between one event and another.[40] In most Tibetan embryologies the central subject is the developing embryo; in cases where symbolism is explicit, the subject may alternatively be the contemplative who is meant to undergo the spiritual transformation described embryologically. Embryological accounts certainly have a well-marked beginning, middle, and end: they invariably begin with a description of conception, always present some information about the process of development throughout gestation, and commonly end with the occurrence of birth. The more narrativized embryologies may even possess peripeteia, a sudden or unexpected reversal of circumstances or situation, a common feature in literary works. Many embryologies have an identifiable narrative voice, commonly that of a religious teacher (rarely, as we will see, that of a medical clinician); alternatively, in some accounts the embryo itself narrates its experience of

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[40] Hayden White, "The Value of Narrativity in the Representation of Reality," in *On Narrative*, ed. W. J. T. Mitchell (Chicago: University of Chicago Press, 1980), 7.

conception, gestation, or birth. Finally, the details of conception and development are explicitly about the necessary connections between one event and another, an essential feature in the narrative form.

Embryology is a particularly interesting object for study as narrative because, as Punday has pointed out in "A Corporeal Narratology?", the human body is often forgotten in narratology. Punday explains that narratology has traditionally been interested more in discourse, that is, the manner in which the narrative is expressed, than in focusing on the elements that make up the story—the actual events, actors, and places.[41] Looking at these elements involves considering how the objects represented in the story shape the narrative that represents them. Punday does not mean that writers have ignored the human body in individual narratives, but rather that when writers do address the body's role in narratives—for example, to investigate narrative's role in defining gender—they do not generally take the next step and raise fundamentally narratological issues that may affect and be affected by the body itself. Feminist narratology that links gender and narratological concepts, for instance, focuses primarily on women's social position or subjective experience, and not directly on the bodies that the narratives represent. Punday defines what he calls the central question of a true corporeal narratology: "How do certain ways of thinking about the body shape the plot, characterization, setting, and other aspects of narrative?"[42]

Hayden White argues that historiography is an especially fruitful ground to think about the nature of narrativity because it is where the imaginative intersects with the real.[43]

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[41] Daniel Punday, "A Corporeal Narratology?," *Style* 34, no. 2 (2000): 227.
[42] Ibid.: 228.
[43] White, "The Value of Narrativity," 4.

Like history, embryology is explicitly describing events that are identified as "real," rather those that are explicitly described as "imaginary."[44] One aim of this dissertation will be to understand what that reality is for Tibetan embryological narratives. We will quickly see that this reality may not be the physical reality of the embryo's development, as is the case in modern biomedical embryology. It may become productive, furthermore, to think of embryology as a kind of historical narrative, an attempt to describe historical events—historical events both at the personal level and at the cosmological level. Another important part of the historical narrative, Hayden agrees with Hegel, are themes of law, legitimacy, or, more generally, authority—we will see this to varying degrees in embryology too, drawing the parallel between embryology and historiography even more finely. Also part of most historical narratives is the latent or manifest desire to moralize the events it addresses,[45] again a central feature of many Tibetan embryological narratives.

Certainly, not all histories are narratives; White points to annals, which are simply a list of events in chronological sequence, or chronicles, which begin to tell a story but then do not finish it, as examples of historical literature in which the impulse to narrativize events is ignored. Similarly, Tibetan texts narrativize embryology to a greater or lesser extent. The earliest Tibetan-authored medical embryologies from the twelfth century follow very closely the *Four Tantras'* spartan account of embryology and have very little to add of their own. By contrast, by the fourteenth or fifteenth centuries, embryologies such as those by Longchenpa

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[44] The "real" and the "imaginary" are, of course, problematic concepts in Buddhism and my claim here should be read loosely to indicate that, even in Tibetan literature, both history and embryology are written to express series of events that have actually happened, as opposed to *explicitly* fictional literature, say, for which there is no such explicit or implicit claim made. The question remains what the events described are really meant to indicate. I will expand on this issue over the course of the dissertation.

[45] White, "The Value of Narrativity," 14.

or Lodro Gyalpo are elaborately embellished and take on a variety of narratological features. There are also differences in *what* is narrativized: some writers spend time embellishing the experiences of the embryo in the womb, filling out the embryo's "character." In other texts it is made explicit that embryogeny is a metaphor for spiritual development, and embryology is used to narrativize the experience of spiritual development for the contemplative.

There are two interpretive issues that intertwine throughout this dissertation: one, that of how *I* am understanding traditions of Tibetan embryology, and two, that of how early *Tibetans* understood Indian embryology and developed their own traditions of writing on the topic. On each of these fronts I am interested in both mimesis, the understanding of how an intellectual model or account of an event is meant to correspond to reality, and hermeneutic, the interpretation of details and their integration into a coherent story. As I consider whether embryological knowing can be more fruitfully viewed as a form of narrative knowing than a form of logico-scientific knowing, embryology appears as a method for truth-telling that expresses religious taxonomies, moral or political reflections, and a variety of other aims. These are true stories, shaped and articulated by physiological concepts. Far from trivial, they use the human body to address some of the most fundamental questions of life: who we are, why we are here, and how we should best act in life.

IV. b. Narrative, Identity, and History

In the next chapter I will survey the texts that will provide this dissertation with Tibetan narratives of embryology. Although embryology was discussed in a wide range of

Indian sources for a millennium before reaching Tibet, only a small number of those texts were available to Tibetans by the eleventh century. Those that did make it across the Himalayas represented a fairly disparate range of traditions, however, and Tibetans were thus introduced to Indic embryologies through Āyurvedic medical, Buddhist sūtric, and Buddhist tantric texts. Chinese sources were presumably available to Tibetans as well, but although I will make note of some early Chinese accounts of embryology, I have identified no concrete evidence that these traditions played a role in the development of Tibetan embryological knowledge. From these origins, Tibetans began composing a wide range of literature that contained discussion of embryology. As an introduction to the sources for this dissertation, chapter two will briefly survey the contents and the contexts of such texts.

Chapters three, four, and five will illustrate connections between embryology and issues of fundamental importance in Buddhist religious thought and practice, and the ways in which embryology is used as a forum for debating these issues. In chapter three, I will argue that embryology is a semiotic system for speaking about human identity. This chapter examines descriptions of the human body in different types of Tibetan literature. Who is the main character in an embryological narrative? Most basically, of course, the embryo is a body. But what it is that embryological narratives in particular allowed Tibetan narrators to say about the body? How did Tibetan understandings of the body shape embryology? I will suggest that while medical literature focuses on the body's humoral organization and digestive physiology, these are areas of little concern to religious authors; the body's circulatory system, on the other hand, was a topic of great concern to all. I will argue that in general Tibetan physiological theories describe an adult body that is characterized by

functional adaptability and semanticized structures, and that these are characteristics that inhabit the body from its origins in the womb. The identity of the embryo is formed by an adaptive interaction with its context, and it is therefore inherently polyphonic.

Tibetan embryologies can be interpreted on various levels, however. While on one level the main character is clearly the developing embryo, in some narratives the embryo is a double for the Buddhist practitioner. Who is signified by the character of the embryo, if not the physical embryo itself? In some texts the embryo refers to a religious contemplative who wishes to be "spiritually reborn" and who will therefore enact the process of embryogeny through meditation. Chapter four's close examination of the details of gestation will demonstrate that the composition of embryology in early Tibetan literature was far from straightforward. Despite the twelfth-century Tibetan author's impulse to form intellectual alliances with India, certain issues within embryology were clearly left to the discretion of the individual author. Embryological stories depict Buddhist practitioners of morality and meditation who undertake a soteriological activity of gestation and rebirth. The stories about these characters are various, however: some tell of the suffering of gestation and agony of birth, and others describe gestation and rebirth positively as opportunities to reach higher spiritual attainments. This chapter will argue that embryological narratives are related in structure and purpose to literature on the Buddhist path. In examining the relationship between Tibetan embryologies and models of the religious path, I will explore narratives that use various discursive tools to promote specific religious practices. This chapter thus tells stories of transformation that situate the seeds of change in the origins of the human body.

There is still more to say about how these stories are composed and what they

communicate. In chapter five, I will examine the connections between events in embryological narratives. What causal elements drive those events? Is it solely karma? Or are other causal forces at work during gestation? In this chapter I will argue that embryology allows Tibetan writers to temporalize doctrinal issues. The "emplotment" of embryological narratives transforms the events of embryogeny into stories with specific rhetorical functions, and it thereby imbues doctrine with a sense of time. Embryological narratives define certain acceptable paradigms for change and growth. Over the course of this chapter, by examining competing models for causation and human growth, we will see that while karma was vital to some models, others emphasized the power of other psychosomatic forces to effect change. In this discussion we will observe once again that embryology is at the center of a fundamental Buddhist philosophical issue.

At the same time, I will begin to consider the emplotment of the narration of Tibetan embryology itself. How did embryological narratives interact with each other and with their literary environments during this period of Tibetan history? What might embryology tell us about the historical transformations of medical and religious forms of literature? I will propose that religious traditions did not borrow embryology from medical traditions, as most Western scholars assume—rather, embryology is most fruitfully a *religious* topic. For religious writers, embryological narratives were a means of embedding doctrinal messages into human identities: such embryologies are religious doctrines that are narrativized into human lives. For medical writers too, at least by the fifteenth century, embryological narratives were a forum for *religious* theorizing—the topic provided a special context for medical scholars to philosophize about issues of vital importance in *Buddhist*

literature.

Although this project stops with an analysis of embryology, were I to continue the thought, I might shift focus from narratives of embryology to historical narratives, arguing that there exists an important parallel between how embryological narratives construct identity and how historical narratives do so. Arguably, if embryology is a narrative that defines individual identity, historiography is the narrative that defines social or institutional identity. Can we see any parallels between models of expressing human identity and models of expressing social identity? What are the organizing themes of medical histories in Tibet, and how are their characters described? As is the case in embryological narratives, in historical narratives we see an emphasis on geographic and geometric conceptualization, for example. The cyclic "moral-temporal structure" that is based on the evolutionary narratives of Buddhist embryology appears as the foundation for the plot of Tibetan historical narratives too. Notions of ethics, causality, and identity shape the creative construction of social history through historiographical narratives just as they do the creative construction of personal history through embryological narratives. Embryological and historical narratives alike appear to be concerned above all with explaining discontinuity as continuity—with making the discontinuous continuous. In the "concluding digression" of this work, therefore, I will gesture toward a new direction of research, suggesting that just as it is of limited value to read embryological narratives only for information on how embryos grow, there is likewise much more to be understood from a historical narrative than simply what events occurred.

CHAPTER 2. EMBRYOLOGICAL NARRATIVES IN TIBETAN LITERATURE

At the outset of this chapter, a few words about what I mean by "literature" are required. As Cabezon and Jackson point out, "literature" is a Euro-American analytical category that should not be uncritically applied to the Tibetan context. Until the twentieth century was there not a term in Tibetan that clearly correlated to the English term "literature."[46] Not without reservation, Cabezon and Jackson suggest the Tibetan *rig gnas kyi gzhung*, "texts of the cultural sciences," as an acceptable equivalent, in which case "literature comes to be defined functionally and pragmatically as those texts whose study yields the kind of knowledge worth having."[47] Encompassing ten subject categories into which most, if not all, Tibetan textual output is arranged, a notion of categories of Tibetan literature that relies upon the cultural sciences schema seems a suitable beginning place for the present discussion.

In chapter one I argued for the benefits of reading embryology as narrative. It should be noted that our commonplace Euro-American notion of "narrative" tends to be conditioned by the prominent role of the novel in literary criticism, and therefore also by a sense of the novel's fictional truth-status. As I mentioned in the last chapter, in the last quarter of the twentieth century many theorists in both the humanities and the social

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[46] Jose Ignacio Cabezon and Roger R. Jackson, "Editors' Introduction," in *Tibetan Literature: Studies in Genre*, ed. Jose Ignacio Cabezon and Roger R. Jackson (Ithaca: Snow Lion Publishers, 1996), 17. In the twentieth century Tibetan writers began to use the term *rtsom rig* as an equivalent to the English term, "literature."

[47] Ibid. An Indic scheme imported from India and adopted in Tibet by the thirteenth century, the five minor "cultural sciences" (*rig gnas*, Skt. *vidyā sthāna*) are grammar (*sgra*), poetics (*snyan ngag*), metrics (*sdeb sbyor*), drama (*zlos gar*), lexicography (*mngon rjod*); and the five major cultural sciences are the sciences of words (*sgra*), syllogisms (*gtan tshig*), healing (*gso ba*), construction and arts (*bzo ba*), and religion, or "inner meaning" (*nang don*).

sciences came to view narrative not as "just an impressionistic substitute for reliable statistics,"[48] but as a valuable way of understanding and explanation in itself. Narrative, of course, is commonly found as a form of literature; our sense of what "literature" is must likewise go beyond the everyday, but narrow, sense of its association with fiction alone. To call embryology narrative, therefore, is not to call it fictional, for the narrative form can be used to express information in ways that are fictional or nonfictional, literary or nonliterary, verbal or nonverbal. Thus, oral narratives aside, the widest, most neutral and value-free sense of the term "literature" may encompass a full range of written material—philosophical or scientific, fictional or non-fictional, prosodic or schematic, scholastic or common.[49]

I. The sources for Tibetan embryology

From the beginnings of recorded history, medical information of various types has been shared with Tibetans by scholars from surrounding regions. Histories of medicine in Tibet portray the early period of Tibetan medicine—from the "pre-historical" period to the twelfth century—as a cosmopolitan age in which medical knowledge was collaboratively generated by scholars from areas across central, south, and east Asia. The brief survey of medical literature in the following pages will focus only on texts that provided source

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[48] Wallace Martin, *Recent Theories of Narrative* (Ithaca: Cornell University Press, 1986), 7.

[49] In this case by "literature," I intend to ignore the way in which the term commonly implies an honorific value statement, as in the statement, "this work lacks literary value." In addition, because numismatic and epigraphic evidence are not utilized in this study, I will not address stretching the boundaries of "literature" beyond that of texts recorded on paper or woodblocks, although in another context one might make a point of doing so. Similarly, although many of the texts I will consider quite possibly originated as "oral literature," because the forms we have access to now are written, I will refer to them as written literature. For a fascinating and compelling discussion of authorship in Tibet, see Jose Ignacio Cabezon, "Authorship and Literary Production in Classical Buddhist Tibet," in *Changing Minds: Contributions to the Study of Buddhism and Tibet in Honor of Jeffrey Hopkins*, ed. Guy Newland (Ithaca: Snow Lion Publications, 2001).

materials for the study of embryology. (In the conclusion, I will discuss the historiography of Tibetan medicine from a wider viewpoint.) An introduction to medical literature on other topics is beyond the scope of this discussion, although I will do my best to refer readers interested in such issues to separate published works as appropriate.

I. a. Sources from India

I. a. i. Indian medical sources

In the history of Tibetan medicine, Indian Āyurveda holds an unmatched place of influence. Classical Indian Āyurveda itself is closely related to a range of philosophical systems, the Nyāya-Vaiśeṣika and Sāṃkhya schools playing perhaps the largest roles. Āyurvedic theory is also influenced by Yoga traditions concerned with controlling the mind and senses and avoiding excess, and by early tantric principles emphasizing the body and the structural equivalence of macrocosm and microcosm. The conceptual systemization of these philosophical systems into medical theory owes much to the medical treatises commonly attributed to three scholars, Caraka, Suśruta, and Vāgbhaṭa, known as the "great trio" (*bṛhat trayī*) of classical Āyurveda, although the actual identity of these figures is contested.[50] The works attributed to them are still today considered to be the seminal literature of the Āyurvedic tradition. These early Āyurvedic texts represent a conglomeration of many theories of the day—while Sāṃkhya and Vaiśeṣika theoretical structures are often most clearly evident, the medical texts exhibit similarities to Vedānta, Nyāya, Yoga, Buddhist and Jain

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[50] The *Caraka saṃhitā*, for instance, is said by some scholars to be originally composed by Agniveśa, from before the seventh century BC, and later enlarged upon by Caraka, although in fact Caraka is a name attributed to several figures and also to an entire school of mendicants who practiced medicine. See Sharma, *History of Medicine in India*, 175-195. Also see Dasgupta, *History of Indian Philosophy*, Volume 2.

doctrines as well.

The structure of the *Caraka saṃhitā* is closely followed by Vāgbhaṭa and, to a degree, by the Tibetan medical text, the *Four Tantras,* as well. The *Caraka saṃhitā,* stabilized in the form we know now in the first few centuries of the Common Era, is the most influential text of classical Āyurveda. It contains one hundred and twenty chapters divided into eight main sections, or "books": Sūtra-sthāna, a general synopsis (thirty chapters); Nidāna-sthāna, on pathology (eight chapters); Vimāna-sthāna, on tastes, the humors, and classifications of patients, physicians, and textbooks (eight chapters); Śārıra-sthāna, on the human body, including anatomy, reproduction, and midwifery (eight chapters); Indrıya-sthāna, on prognostic technique (twelve chapters); Cikitā-sthāna, on treatment of disease (thirty chapters); Kalpa-sthāna, pharmaceutical formulae (twelve chapters); and Siddhi-sthāna, on various therapeutic measures (twelve chapters).[51]

The basic assumptions of classical Āyurvedic thought include the idea of the material constitution of human nature (Skt. *pañcabhūta*) and the idea that human behavior is based on the three humors (Skt. *dośa*). The former is closely related theoretically to the Nyāya-Vaiśeṣika philosophical system, and the latter to the Sāṃkhya. The primary site for the description of the mechanics of transmigration and the psycho-physical features of the being that is reborn, the first chapter of *Caraka's* fourth major section, the Śārıra-sthāna, presents a refined explanatory model with a cosmological bent that is clearly Sāṃkhyan in inspiration. This chapter begins by outlining the twenty-four Sāṃkhyan principles (Skt. *tattvas*). In his

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[51] There are several partial translations of this text, including *Agniveśa's Caraka saṃhitā; Caraka saṃhitā.*

commentary on the *Caraka* verses, Cakrapāṇi cites Sāṃkhya texts, the *Sāṃkhya-kārikā* in particular, as authoritative sources. The root verses are explicit about their debt to Sāṃkhya; an explanation of the best way to attain salvation, for instance, concludes with the line, "This is what the yogins, the virtuous ones, the followers of the Sāṃkhya system, and the liberated ones say."[52]

The second author in the trio of classical Āyurvedic authors, Suśruta, is said to have been responsible for the *Suśruta saṃhitā*, a text structured similarly to that of Caraka.[53] Suśruta is also a difficult figure to date, although Srikanta Murthy speculates that he may have flourished between 1500 and 1000 BC. Murthy goes on to say, however, that the *Suśruta saṃhitā* known today was likely redacted by the fourth-fifth-century physician Nāgārjuna, although it is unknown how much this Nāgārjuna altered the original text.[54] The *Suśruta saṃhitā* is renowned among Āyurvedic texts for its study of surgery, although it deals comprehensively with all branches of Āyurveda. Despite their fundamental importance in the history of Indian medicine, however, I have not seen the works of Caraka or Suśruta cited in Tibetan embryological literature prior to modern times.

In Tibet, the most influential Indian medical text with a presentation of embryology

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[52] *Agniveśa's Caraka saṃhitā*, verse 4.1.151. Hereafter cited in the body of my text as *Caraka*.

[53] The *Suśruta-Saṃhitā* section on the human body can be found loosely translated in Dinkar Govind Thatte, *Śārirasthānam Suśruta-saṃhitā (Section on the Study of the Human body), Text with English Translation and Commentary*, Kashi Ayurveda Series No. 16 (Varanasi: Chaukhambha Orientalia, 1994).

[54] Interestingly, Murthy notes that this text was translated into Arabic as early as the ninth century AD. See his chapter on Suśruta in Sharma, *History of Medicine in India*, 196-204. Also see Dasgupta, *History of Indian Philosophy*, Volume 2. On the question of which Nāgārjuna this is, see Murthy's essay on the figure in Sharma, *History of Medicine in India*, 291-297. There he speculates that this Nāgārjuna is a fourth-fifth-century writer who composed a number of medical texts, several of which were later translated into Tibetan and now exist in the Tibetan canon. This would then be a different person than the famous author of philosophical texts, and a different person also than the two authors with the same name of tantric and alchemical and erotic texts.

is Vāgbhaṭa's *Aṣṭāṅgahṛdayasaṃhitā* (*Yan lag brgyad pa'i snying po bsdus pa*, referred to from this point in English as the *Eight Branches*). Several figures with the name Vāgbhaṭa are known in Indian history, and there is little agreement among scholars on the identity of the author of this Āyurvedic text.[55] Rao summarizes varying views on the dating of the author of the *Eight Branches*, providing dates that range from the second century BC to the thirteenth AD. Dasgupta and Vogel, however, attribute the text to a seventh-century figure with Buddhist tendencies who was known outside India as well as within, as attested by mention of his works in the travel books of the Chinese pilgrim I-shing, among other evidence.[56] Vāgbhaṭa is known in Tibetan by the names *pha khol*, *pha gol*, or simply *dpa' bo*. Vāgbhaṭa's text and its Indian commentaries, along with other medical texts that were not sources for embryology but for other medical topics, were included in the Tibetan Buddhist canon, and they form some of the primary sources for later Tibetan studies of embryology.[57]

Similar in structure to the *Caraka saṃhitā* and the *Suśruta saṃhitā*, Vāgbhaṭa's *Eight*

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[55] B. Rama Rao summarizes the debates over the identity of the medical writer named Vāgbhaṭa in his chapter on the figure in Sharma, *History of Medicine in India*, 205-221. Also see Dasgupta, *History of Indian Philosophy*, Volume 2, 433-436; Claus Vogel, *Vāgbhaṭa's Aṣṭāṅgahṛdayasaṃhitā, the first five chapters of its Tibetan version*, Abhanglungen fur die Kunde des Morgenlandes (Wiesbaden: Deutsche Morgenlandische Gesellschaft, Komissionsverkag Franz Steiner GMBH, 1965), the introduction of which has a lengthy discussion of the text's authorship. This text too, Rao states, was translated into Arabic in the eighth or ninth century.

[56] Vogel, *Vāgbhaṭa's Aṣṭāṅgahṛdayasaṃhitā*, 8. Dasgupta, *History of Indian Philosophy*, Volume 2, 433.

[57] Translations of other medical books in the Tibetan Tangyur (*bstan 'gyur*), include Bhagwan Dash, *Nāgārjuna's Yogasataka* (Library of Tibetan Works and Archives, 1976); R.E. Emmerick, "Ravigupta's Siddhasara," *Verzeichnis der orientalischen Handschriften in Deutschland* Supplemental Volume 23 (1980-1982): published in Sanskrit and Tibetan with an English translation. Also see the *sman 'tsho ba'i mdo*, published in English translation with reconstructed Sanskrit in Bhagwan Dash and Doboom Tulku, *Positive Health in Tibetan Medicine* (Delhi: Sri Satguru Publications, 1991). For more on medical texts authored by Nāgārjuna and other Indians held in high regard by the Tibetan medical tradition, see Lobsang Rabgay, "The Origin and Growth of Medicine in Tibet," *Tibetan Medicine* 3 (1981). Also see Bhagwan Dash's essay on Tibetan medicine in Sharma, *History of Medicine in India*, 453-463. In all twenty-two Indian medical texts are included in the Tibetan canon, although in this dissertation I only refer to those that are of direct relevance to the study of embryology.

Branches has 120 chapters. The Sūtra-sthāna, the section on the human body, has six chapters: on embryology, disorders of pregnancy, parts of the body (anatomy and physiology), classification of vital points, signs of death, and dreams and omens. The chapter on embryology covers topics such as the formation of the embryo, determination of the embryo's sex, menstruation, the features of healthy reproductive fluids, fertile periods, ceremonies for conception in general and conception of a male child in particular, features of a pregnant woman, the sequence of fetal development, practices of labor and delivery, and postpartum care. As we will see, the structure of this book is loosely replicated by the Tibetan *Four Tantras* and most medical texts on the body in Tibet subsequently. Despite this text being one of the most widely cited sources in Tibetan medical texts, however, we will also see in that in many respects its authority is disregarded in the context of embryology.

The *Eight Branches* reached Tibet via Nepal by the eleventh century and was translated by the prolific translator Rinchen Zangpo (*rin chen bzang po*, 957-1055). Two Indian commentaries of this text were also quickly made available to Tibetans.[58] As I will discuss further in the conclusion, Rinchen Zangpo studied and translated the works of Vāgbhaṭa and his commentator Dawa Ngonga (*zla ba mngon dga'*, also called *kha che zla ba mngon dga'*, and sometimes called *zla ba la dga' ba*; Skt. *Candranandana*, or possibly *Candrābhinandana*), and he taught them to a student, who carried on this tradition by

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[58] An auto-commentary, *Yan lag brgyad pa'i snying po shes bya ba'i sman dpyad kyi bshad pa*, and *Yan lag brgyad pa'i snying po'i rnam par 'grel pa tshig gi don zla zer*, by *Zla ba la dga' ba* or *zla ba mngon dga'* (Skt. *Candranandana* or possibly *Candrābhinandana*). These and other medical texts included in the Tibetan Tangyur have recently been published in book form in the four volume collection, *Gso ba rig pa'i rtsa 'grel bdam bsgrigs--bstan 'gyur nang gi gso ba rig pa'i skor gyi dpe tshogs*, (mi rigs dpe skrun khang gi rtsi 'khor, 1996). On the identity of the commentator Dawa Ngonga, see Manfred Taube, *Beitrage zur Geschichte der Medizinischen Literatur Tibets* (Sankt Augustin: VGH Wissenschaftsverlag, 1981), 28; Vogel, *Vāgbhaṭa's Aṣṭāṅgahṛdayasaṃhitā*, 15-16.

passing it through a lineage of students.[59] The famous Tibetan physician Yuthog Yonten Gonpo (*g.yu thog yon tan mgon po*, 1112-1203) is said to have relied on this text especially as a guide in his medical practice for the first part of his life, until he received, edited, and made public the *Four Tantras*.[60]

I. a. ii. Indian Buddhist sources

In chapter one I mentioned that many Indian Buddhist texts record medical information of various types. Some of these, such as the *Abhidharma*, do include brief descriptions of the mechanics of conception and the process of fetal development. A pair of Buddhist texts stands out among these as the most widely-cited source for embryology among Tibetan authors. Among Buddhist sūtras, canonical texts cited as the speech of the Buddha himself, the most heavily utilized source for embryological detail in Tibetan texts is the Mahāyāna Buddhist sūtra called the *Sūtra of Teaching Nanda about Entry into the Womb*.[61] Another text, the *Sūtra of Teaching Nanda about Abiding in the Womb*, generally appears in most editions of the canon just before or just after the *Entry into the Womb*.[62] In

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[59] According to Sangye Gyatso, Rinchen Zangpo taught the Indian texts to his student, Shangshung Sherab Od (*zhang zhung pa shes rab 'od*). This student transmitted these teachings to one Gyaton Drapa Sherab (*rgya ston grags pa shes rab*), who wrote a commentary on the *Four Tantras* called *gSer gyi bang mdzod* and a history of medicine, neither of which are now extant. Gyaton Drapa Sherab passed the teachings on to Yuthog Gyakar Dorje (*g.yu thog rgya gar rdo rje*), who passed them to Yuthog Jidpo (*g.yu thog brjid po*), who passed them to Garpo (*mgar po*). These and other figures are described at Sangs rgyas rgya mtsho, *Gso rig sman gyi khog 'bugs* (Dharamsala: Tibetan Medical & Astro Institute, 1994), 177-178. See note 13 above on the identity of Dawa Ngonga.

[60] Ibid., 229.

[61] *Āyuṣhmannandagarbhāvakrāntinirdesha, tshe dang ldan pa 'dga' bo la mngal du 'jug pa.* Peking edition (Tokyo-Kyoto: Suzuki Research Foundation, 1955), 760.13, vol. 23. Larson, "The Concept of Body in Āyurveda and the Hindu Philosophical Systems."

[62] *dga' bo la mngal na gnas pa.* In the Nyingma edition of the *bka' 'gyur* these are text 58 and 57 (*'jug pa* comes second) in Volume 16. I do not know whether these are two Tibetan translations of the same Sanskrit original,

these texts the Buddha explicitly describes to his disciple Ananda the factors necessary for conception and the entire embyogenical process. These texts—it is most commonly the *Entry into the Womb* that is cited—are extensively quoted by nearly every author who writes about embryogenical development in both medical and religious traditions and were certainly available to Tibetans by the eleventh century, if not for some time before then. During debates on embryological topics, other sūtras are referred to as well as authorities on the process of transmigration, the nature of the transmigrating entity, the workings of karma and the four (or sometimes five) elements of nature, the relationship between the mind and the body, and other topics relevant to embryology.

The other significant class of Indian texts utilized by Tibetan authors discussing embryology and embryological symbolism are, of course, the Indian tantras. Detailed contemplative practices explicitly modeled after the processes of human conception, development, and birth—to be discussed in later chapters—are present in a wide range of Indian Buddhist tantras, such as the *Kālacakra, Vajrabhairava, Guhyasamāja, Cakrasaṃvara, Saṃvarodaya,* and *Hevajra* tantras, as well as in numerous exegetical works. Indeed, esoteric Buddhism is renowned as a site for the prolific narration of embryology, renewing an interest in the soteriological capabilities of the human body.

At the time of the second diffusion of Buddhism in Tibet, therefore, Tibetans had available to them a range of sources with which to study Indian embryologies: Vāgbhaṭa's medical text placed embryology in the context of the study of human anatomy, physiology

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or whether there were two Sanskrit texts. Cursory examination of portions of the two Tibetan texts shows them to be very similar, but not the same. A more detailed examination should be done.

and obstetrics; the Buddhist sūtras located embryology in the context of Buddhist teachings on suffering and ethical behavior; and the contemplative practices and rituals of the Buddhist tantras taught embryology as a model for spiritual development. How these various embryologies are interpreted at this point in history, how these interpretive choices are made, and how those choices dictate the future of medical and religious writing, are questions that shape this dissertation.

I. a. Indigenous sources and sources from China

India was not, of course, the only source for medical knowledge in Tibet. Some of the earliest medical practices by Tibetans are described in indigenously Tibetan Bon histories.[63] Narratives describing experiences of illness and healing are found in the earliest of Tibetan texts, in Dunhuang and other Central Asian documents, dating from perhaps the ninth century AD.[64] Details on medical history prior to the reign of the seventh-century

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[63] Some Bon scholars claim that Bon medical texts and lineages of oral transmission can be traced to 1075 BC. Menri Trizin Lungtok Tenpai Nyima, "Tibetan Medicine, A Bon Perspective," in *First International Congress on Tibetan Medicine* (Washington, D.C.: Audio recording, Conference Recording Service, 1998).

[64] Mona Schrempf (personal communication, 2002) notes the following sources listing examples of ancient medical texts in Tibet or other references to early Tibetan medicine. Anne-Marie Blondeau, *Matériaux pour l'étude del'hippologie et de l'hippiatrie tibétains (a partir des manuscripts de Touen-houeng)* (Geneva-Paris: Librairie Droz, 1972); Enrico Dell'Angelo, "Notes on the History of Tibetan Medicine," *Tibetan Medicine* 8 (1984): 4-6; S.G. Karmay, *The Treasury of Good Sayings. A Tibetan History of Bon* (Oxford: Oxford University Press, 1972); S.G. Karmay, "L'Apparition du Petit Homme Tete Noire," *Journal Asiatique* 274 (1986); Marcelle Lalou, "Les Cent mille nāga," in *Festschrift Moriz Winternitz 1863-1933*, ed. O. Stein and W. Gampert (Leipzig: Otto Harrassowitz, 1933); Marcelle Lalou, "Le culte des nāga et la thérapeutique," *Journal Asiatique* Jan-Mar (1938); Marcelle Lalou, "Texte Médical Tibétain," *Journal Asiatique* CCXXXIII (1942-42); Marcelle Lalou, "Les texts Bouddhiques au temps du Roi Khri-sron-lde-bcan," *Journal Asiatique* 261 (1953); Marcelle Lalou, "Fiefs, Poisons et Guérisseurs," *Journal Asiatique* CCXLV (1959); Ariane Macdonald and Yoshiro Imaeda, *Choix de Documents Tibétains conservés à la Bibliotheque Nationale* (Paris: Bibliotheque Nationale., 1978); David L. Snellgrove, *The Nine Ways of Bon*, Oriental Series, vol. 18 (London: Oxford University Press, 1967); Rolf A. Stein, "Tibetica Antiqua V. La Religion indigene et les Bon-po dans les manuscripts de Touen-Houang," *Bulletin de l'Ecole Francaise d'Extreme-Orient* 1, no. LXXVII (1988); Manfred Taube, *Die Tibetica der Berliner Turfansammlung* (Berlin: Akademie-Verlag, 1980), 73-78; Pasang Yonten, Tsepak Rigzin, and Phillippa Russell, "A History of the Tibetan Medical System," *Tibetan Medicine* 12 (1989): 36.

Tibetan king Songsten Gampo are especially unclear; our understanding is limited to the knowledge that Tibetan medical practice involved dietary prescriptions, rituals, a pharmacopoeia, and possibly minor surgery. Contemporary historian Kalsang Trinley, for example, describes in his history of medicine very early healing rituals using the Tibetan Zi (*gzi*) stone and fire, and the practice of trepanation.[65] While these early sources provide fascinating information on early medical practices, however, I am not aware of early accounts of embryogensis in these sources.

An early Tibetan language text with a substantial account of embryogenesis is the *King of the Moon* (*sman dpyad zla ba'i rgyal po*).[66] Fernand Meyer explains that according to the traditional Tibetan view of this text's provenance it was expounded by Mañjuśrī to four sages at the request of Nāgārjuna at Wu-tai Shan in China, an act that resulted in both Sanskrit and Chinese versions of the text. The Chinese version is said to have been translated into Tibetan at the request of King Trisong Detsen in the eighth century, by the translators Hashang Mohoyen and Vairocana; an additional translation was apparently made from the Sanskrit version as well.[67] Written in verse, the Tibetan translation of this text has one hundred and thirteen chapters and includes a fairly detailed account of embryonic development, an account that is unlike any other embryology I have seen. Although this text was available in Tibet by at least the fourteenth century, and probably some time before that time, its provenance and origins are debated by Tibetan medical historians. In secondary

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[65] Skal bzang 'phrin las, *Bod kyi gso ba rig pa'i byung 'phel gyi lo rgyus gsal bar ston pa baidurya sngon po'i zhun thigs* (krung go'i bod kyi shes rig dpe skrun khang, 1997), 32-39.

[66] *Sman dpyad zla ba'i rgyal po*, trans. bai ro tsa na (Dharamsala: Tibetan Medical & Astro Institute, 1994).

[67] Gyurme Dorje and Fernand Meyer, eds., *Tibetan Medical Paintings: Illustrations to the "Blue Beryl" Treatise of Sangye Gyamtso (1653-1705)*, 2 vols. (New York: Harry N. Abrams, Inc. Publishers, 1992), vol. 1: 161.

literature as well as in some Tibetan sources, such as Lodro Gyalpo's sixteenth-century medical commentary, the *Transmission of the Elders*, this text is sometimes affirmed as the Tibetan translation of an originally Chinese text.[68] Sangye Gyatso's *Blue Beryl*, however, states that although it is dissimilar to other known Indic sources on gestation, it is nonetheless clearly a translation of an Indian text. Certainly in structure and complexity of detail it seems to be much more similar to Indic or indigenous Tibetan embryologies than earlier Chinese sources for embryology. Nonetheless, it is never cited as an authoritative source on embryology in subsequent extant Tibetan texts. Because it appears to have had such a minimal influence on subsequent Tibetan embryologies, I will not focus closely on this text in this dissertation.

While we might expect significant influences on Tibetan embryology from Chinese sources, in fact this has been difficult to confirm. In medical treatises on embryology, Tibetan authors do not credit Chinese traditions with contributing knowledge of embryology, anatomy, or physiology, perhaps not surprisingly. Certainly, more research is needed to begin to address this question. The few available Western-language sources on the topic describe Chinese embryological systems that are significantly different than anything seen in Tibetan literature. In a book to be published later this year, Anne Kinney reports a rise in interest in theories that correlated embryonic development with cosmogony in China during the late Warring States and Han periods, several centuries before the Common Era. Kinney notes that the earliest known forms of embryology were most centrally concerned

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[68] Zur mkhar pa blo gros rgyal po, *Rgyud bzhi'i 'grel pa mes po'i zhal lung*, 2 vols. (krung go'i pod kyi shes rig dpe skrun khang, 1989), 128.

with expressing political or spiritual aims. "By describing the unfolding of both the cosmos and human life as guided by one power," she writes,

> these texts reinforced the view that one who understands how the Dao orders nature will understand how to govern the world. Additionally, texts such as the *Wenzi* and the *Huainanzi* enjoin the man who desires all-penetrating wisdom to acquire knowledge of cosmogonic origins and principles by casting off the burdens of civilization, that is, by reversing human development so that it proceeds backwards in time to infancy, the prenatal state, and finally to its origin in undifferentiated chaos. The goal of this meditative strategy is to enable the practitioner to perceive the Dao at its purest and most fundamental and then to act in accordance with it.[69]

Kinney's research traces the role of embryology in Chinese literature as participating in a transition from the authority of the ancestors and civic bureaucracy to the authority of natural law, a shift that takes place during these centuries in philosophical and political theory. She notes a related transformation in health care practices, which viewed conception, birth, and child development as governed by the more predictable laws of nature.[70] Some Chinese texts thus prescribe beneficial foods or behaviors for the prospective mother during each month of pregnancy; these prescriptions are meant to influence the development of the fetus[71] (an issue to which I will return in a later chapter).

While we will see in chapters to come that these general aims are strikingly similar to

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[69] Anne Kinney, *Representations of Childhood and Youth in Early China* (Stanford: Stanford University Press, 2003), 349-350. Fascinating details on early Chinese textual traditions of embryology can also be found in Charlotte Furth, *A Flourishing Yin: Gender in China's Medical History, 960-1665* (Berkeley: University of California Press, 1999), 101-116.

[70] Kinney, *Childhood and Youth in Early China*, 359.

[71] Ibid., 363.

much of Tibetan embryology, the structure and detail of these early Chinese embryologies appear to be quite different than those of Tibetan texts. Rituals to change an embryo's sex, for example, take place in the third month of gestation in these early Chinese texts, where in Indian and Tibetan texts such rituals are prescribed during the third *week* of development. Kinney cites a third-century-B.C. text in which fetal growth is directed by the five systems of visceral function (a functional presentation of internal physiological processes) and the five tastes (sour, salty, acrid, bitter, and sweet),[72] a system completely unlike any extant Tibetan formulation. Thus while subtle connections of some type may indeed exist between Chinese and Tibetan embryological thinking, the subject is vast and difficult enough to require a dissertation of its own and will therefore not be the focus of the present work.

In the next two sections, I will survey the types of literature in which Tibetans composed their own narratives of embryology. Such narratives were written in both medical and religious texts. I will begin by contextualizing embryologies that exist in medical texts within a larger presentation of the sub-types of medical literature. These comments will show that, while much is said about embryology by medical writers, in fact the subject occupies a fairly small corner of medical literature as a whole, existing primarily in a single chapter of the *Four Tantras* and then in subsequent commentaries on that chapter. The presence of embryology in Tibetan *religious* texts, by contrast, to be addressed after the discussion of medical embryologies, ranges more widely in context.

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[72] Ibid., 350.

II. The varieties of Tibetan medical literature

Medicine and religion in Tibet, despite their close interaction throughout history, are disciplines and genres of literature with identities that are consciously articulated, at least to some extent. Thus, for instance, there are Tibetan histories of medicine (*khog dbub* or *khog 'bugs*), which are defined as such in contrast to historical genres like royal succession (*rgyal rabs*), monastic chronicles (*gdan rabs*), religious histories (*chos 'byung*), and so forth. According to the influential enumeration of ten "cultural sciences" (*rig gnas*, Skt. *vidyā sthāna*), an Indic taxonomy codified in Tibet by the thirteenth-century scholar Sakya Pandita, the study of religion (*nang don rig pa*) and the study of medicine (*gso ba rig pa*) are two distinct members of the five major cultural sciences, along with the studies of language (*sgra rig*), logic (*gtan tshig rig pa*), and construction and the arts (*bzo rig pa*). Organized in the fourteenth century, the Tibetan Buddhist canon places medical texts under a category of technical treatises, and until the seventeenth century medicine was taught in monasteries as one of the worldly sciences.[73]

As discussed above, the concept of literature, and therefore of literary genre, is of Euro-American origins, and its applicability to the Tibetan context must be questioned. Nonetheless, there *are* Tibetan means of subdividing types of knowledge, which can, at least loosely, correspond to forms of Tibetan textual output. The classification of the cultural sciences is one such taxonomy, although it must be remembered that it too is an import from India that has been overlaid upon the Tibetan context, with varying levels of suitability.

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[73] Fenner, "Origin of the rGyud bzhi," 460.

Other modes of classifying Tibetan literature can be found in the Tibetan Buddhist canon of translated Indian texts, which includes a distinct category for medical texts, or in the collections of Tibetan texts by specific authors (*gsung 'bum*), which possess internal taxonomies—in the form of tables of contents (*dkar chag*)—as well.[74] "Medicine" (*gso rig*) as a category unambiguously receives a place of its own in many Tibetan taxonomies of literature.

In this section, I will consider a possible scheme for classification of texts *internal* to the broad category of medicine. When we talk about medical literature in Tibet, what exactly might be included? Although there are texts that cover several topics and therefore do not fit easily into one of these categories, the following synthetic survey describes nine general types of texts, organized by subject matter, associated with medicine in Tibet.[75]

Texts on nosology, pharmacy, and *materia medica* form the bulk of Tibetan medical works. Nosological texts are listings, descriptions, and classifications of specific diseases, typically composed more in the manner of a reference than a work of prose. Early examples include several texts of the twelfth-thirteen-century *Eighteen Additional Practices* (*cha lag bco brgyad*) collections (texts seven, ten, and sixteen).[76] The third of four units, or "books," of the *Four Tantras*, the *Oral Secret Tantra*, is also an example of this type of text. An interesting feature of these texts is their organizational strategy: the sixteenth text in the

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[74] For comments on this issue see Cabezon and Jackson, "Editors' Introduction."

[75] According to several Tibetan medical scholars, there is no clearly articulated, standardized indigenous Tibetan scheme for classifying types of medical literature (personal communication with Yangga, Lhasa 2002; Dorje Dramdul, Sarnath, 2001; Jampa, Darjeeling, 2000).

[76] G.yu thog gsar ma yon tan mgon po, *G.yu thog cha lag bco brgyad bzhugs so*, 2 vols. (kan su'u mi rigs dpe skrun khang, 1999). This text is available in at least two other editions recently printed in India.

Eighteen Additional Practices collection, for example, arranges diseases quite differently than does the *Four Tantras' Oral Secret Tantra.* What these taxonomies of disease states and the bodily realms they affect say about Tibetan conceptualizations of the body and its relation to society is an interesting topic that warrants future research.

Texts on pharmacy and *materia medica* describe therapeutic prescriptions, sometimes called *lag len,* that involve the combination of medicinal substances, or *materia medica,* including the identification, collection methods, and preparation of medicinal substances. Still today considered the fundamental works on the topic, two reference guides by the prolific Geshe Tenzin Phuntsok (*bstan 'dzin phun tshogs,* b. 1672) composed in 1727 describe over 2,200 substances, the former containing information on raw materials and the latter focusing on pharmacological and pharmacognosical details.[77] The fourth unit of the *Four Tantras,* the *Concluding Tantra,* is also an example of this type of work. Other early examples of such texts include the *Eighteen Additional Practices'* eleventh, thirteenth, and seventeenth texts. Early publications describing therapeutic techniques make various recommendations, some largely pharmacological in nature, and others more focused on ritual, meditation, and mantra recitation. Examples of the latter include, for example, the second and third subdivisions of the *Eighteen Additional Practices'* text twelve, which discuss meditation

Categories of Tibetan medical literature

- Nosological texts
- Texts on pharmacy and *materia medica*
- Dictionaries
- Histories of medicine
- Biographies of medical figures
- Medicine Buddha liturgies
- Descriptions of the human body
- Documents on medical iconography
- The *Four Tantras* and its commentaries

[77] These are now published together as *shel gong shel 'phreng* (pe cin: mi rigs dpe skrun khang, 1986). See also an article about this text, Dashang Luo, "History of Tibetan Medicine and *Crystal Pearl Materia Medica,*" *Tibet Studies* 2, no. 1 (1990).

practices and mantras to be used by doctors as healing strategies, and mantras and other ritual practices to be used for the protection of babies and children; text fourteen from that collection, which discusses rituals, meditations, and mantras for the treatment of lymph disorders (*chu ser*), leprosy, and dermatological disorders; or the collection's eighteenth text, describing mantras for healing wounds, head injuries, eye problems, and other ailments. These examples remind us that distinguishing between medical and religious therapies is not a simple matter.

Other reference works forming part of the canon of medical works are dictionaries of specialized terminology. An early example of a medical dictionary is the eighth text of the *Eighteen Additional Practices* collection, a dictionary of *materia medica*. This text may be quite old, although its authorship is debated. Sangye Gyatso attributes the text to Vairocana, and the seventeenth-century biography of Yuthog Yonten Gonpo attributes the text to a (possibly legendary) figure named Yuthog Yonten Gonpo who lived in the eighth century.[78] Buddhist historians Jaya Pandita (*dza ya panti ta blo bzang 'phrin las*, 1642-1708) and Tsuglag Trengwa (*tsug lag phreng ba*, 1504-1564/66), however, credit a group of thirteenth-century writers, Ja Yeshezung, Shagrampa Nyimapal, Balsam Nyimapal and Sumton Yeshezung.[79] I will discuss some of these figures again later in this chapter, and others in this dissertation's conclusion.

There are a number of Tibetan works—still extant, ranging from the thirteenth

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[78] Rechung Rinpoche Jampal Kunzang, *Tibetan Medicine, Illustrated in Original Texts*, Indian Medical Science Series No. 112 (Delhi: Sri Satguru Publications, 2001), 285; Sangs rgyas rgya mtsho, *Khog 'bugs*, 167. The *Eighteen Additional Practices* text mentioned is entitled *Ming don brda sprod rnam lnga*.

[79] Barbara Gerke, "The Authorship of the Tibetan Medical Treatise 'Cha lag bco brgyad' (Twelfth Century AD) and a Description of its Historical Background," *Traditional South Asian Medicine* 6 (2001): 42.

century to the present date—on the history of medicine, and the history of medicine is also occasionally discussed as a discrete topic within general Tibetan histories.[80] The most famous medical history today remains Desi Sangye Gyatso's 1702 *History of Medicine.* This important text contains information about the development of medicine in India, as well as a history of medicine in Tibet from the eighth to seventeenth centuries, with biographies of many important medical practitioners and descriptions of many texts. Sangye Gyatso's work also analyzes the fifteenth century activities of the Northern and Southern schools of Tibetan medicine, providing a history of both medical schools in the context of a general history of Tibet. While many histories of medicine do include short biographies of noted physicians, as does Sangye Gyatso's, there are also specifically biographical works about Tibetan physicians, the most famous of which is Yuthog Yonten Gonpo's biography.[81]

The category of texts involved in discussing the human body—subjects we know as

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[80] Extant Tibetan works on the history of medicine include:

- The chapter on the history of medicine in the *Stag lung chos 'byung* (*Brgyud pa yid bzhin nor bu'i rtogs pa brjod pa ngo mtshar rgya mtsho shes bya ba bzhugs*, by Stag lung ngag dbang rnam rgyal), written in 1589;
- A chapter on medical history in the Fifth Dalai Lama's *Chronicle* printed in 1643;
- Desi Sangye Gyatso's famous 1702 *Khog 'bugs*;
- The chapters on medicine in the 1545 *mkhas pa'i dga' ston* by Tsug lag phreng ba (1504-1564/1566), (pe cin: mi rigs dpe skrun khang, 1986);
- The ninth chapter of the *bshad mdzod yid bzhin nor bu*, by Don dam smra ba'i seng ge;
- The chapter on medicine in *chos 'byung dpag bsam ljon bzang* by Sum pa mkhan po (1704-1788), (316 ff. in vol. 1 of the 8 vol. printed gsung 'bum in the Potala collection; TBRC Resource Code: W7667);
- Dza ya panti ta blo bzang 'phrin las, *Chos kyi thob yig gsal ba'i me long*, 4 vols. (Beijing block print: completed in 1702). The section on the history of medicine is vol.1, fols. 77-108. The chapters on the history of medicine were translated into German in Taube, *Medizinischen Literatur Tibets.*
- The twentieth chapter of A khu Rinpoche's *dpe rgyun dkon pa' ga' zhig gi tho yig don gnyer kyi kunda bzhad pa'i zla 'od 'bum gyi snye ma.* Ed Lokesh Chandra 1963, iii, 503-601.
- The *Eighteen Additional Practices'* twelfth text;
- The *blon po bka' thang* has information about early Tibetan medicine. E.g., Sangye Gyatso attributes to it the position that the *King of the Moon* is a work by Nagarjuna. Sangs rgyas rgya mtsho, *Khog 'bugs*, 152.

[81] The question of whether there are two individuals named Yuthog Yonten Gonpo is debated by Tibetan scholars. See my brief discussion of this issue in chapter six, where I will also provide bibliographic citations for biographical literature on this issue.

anatomy and physiology—is difficult to describe for there does not appear to be, in fact, a dedicated disciplinary structure to accommodate those topics within medical literature. Several chapters of the *Four Tantras' Explanatory Tantra*, which form the basis for much of this dissertation's study, are the primary examples of this type of medical writing. Significantly, however, although there are numerous texts throughout history devoted to pharmacy or nosology, there appear to be relatively very few texts devoted exclusively to discussion of the structure or function of the human body itself.[82] An exception may be found in surveys of dynastic period medical literature in Sangye Gyatso's medical history that include several texts that appear, from their titles, to focus on explication of the human body from the perspective of human dissection. Pictorial illustrations of the human body and illustrations of disease states and therapeutic activities could also be said to comprise an independent category of medical documentation that focuses on the structure of the body. Fernand Meyer notes that today only one medical painting predating the famous series of seventeenth-century medical paintings (*thang ka*)[83] is known to exist, a fragmentary Dunhuang document depicting moxibustion points on a human figure. He points also to references in medical histories to early texts or documents that appear to include medical drawings, in the works of Yuthog Yonten Gonpo (*g.yu thog yon tan rgon po*) in the twelfth

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[82] This would be a fascinating topic for further research. Zysk comments that gross human anatomy was a topic taught in the Pāli Canon's Sutta Piṭaka, which deals with ascetic discipline, and not in the medical sections of the Vinaya Piṭaka. Zysk, *Asceticism and Healing*, 34. Dasgupta claims that a comparison of the *Suśruta saṃhitā* with Vāgbhaṭa's work suggests that the study of anatomy had almost ceased by the time of Vāgbhaṭa. Dasgupta, *History of Indian Philosophy*, Volume 2, 433. This paucity may be compared to early Greek medicine, where Edelstein's research suggests that anatomical knowledge in general played a very small role in the practice of medicine. Ludwig Edelstein, *Ancient Medicine; Selected Papers of Ludwig Edelstein* (Baltimore: Johns Hopkins Press, 1967), 261-266. Also see Mirko D. Grmek, ed., *Western Medical Thought from Antiquity to the Middle Ages* (Cambridge: Harvard University Press, 1998).

[83] I refer here to those paintings published in Dorje and Meyer, eds., *Tibetan Medical Paintings*.

century, Drangti Pelden Tsoje (*brang ti dpal lden 'tsho byed*), in the thirteenth century, and Zurkhar Nyamnyid Dorje (*zur mkhar nyam nyid rdo rje*) in the fifteenth century. Meyer also cites several early references to texts that may be dissection manuals with drawings; Sangye Gyatso's history also lists such texts.[84]

What should be clear at this point is that defining the boundaries of "medicine" as a discipline is somewhat complicated. Besides those I have discussed, what about liturgical texts focusing on the Medicine Buddha? Such texts are traditionally—and still today—used by physicians, considered in many cases to be an integral part of a responsible physician's practice. What are we to do with texts on alchemy, a subject that clearly intersects with studies of pharmacy and *materia medica*? What about scriptures from the religious canons on yogic or dietary practices that are expressly claimed to have healthful, as well as spiritual, benefits? I will leave this thorny question for a future work.

II. a. The Four Tantras and its contested origins

The preceding survey, however problematic ultimately, is not an indigenously Tibetan classification of medical genres—as I stated earlier, there is apparently no such taxonomical scheme in use—but is rather a general description of the roughly distinct varieties of Tibetan textual content one encounters today in broad reading on Tibetan

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[84] Fernand Meyer, "Introduction: The Medical Paintings of Tibet," in *Tibetan Medical Paintings: Illustrations to the "Blue Beryl" treatise of Sangye Gyamtso (1653-1705)*, ed. Gyurme Dorje and Fernand Meyer (New York: Harry N. Abrams, Inc. Publishers, 1992), 11. Some of these early sources for medical iconography are also mentioned in Natalia D. Bolsokhoyeva, *Introduction to the Studies of Tibetan Medical Sources* (Kathmandu: Mandala Book Point, 1993), 31-32. For an excellent analysis of medical iconography in Tibet, including comments on its relationship to Chinese medical iconography, see Meyer, "Introduction: The Medical Paintings of Tibet," 7-12. For lists of texts with titles such as which lists texts with titles such as *ro bgra 'phrul gyi me long, ro bgra thu gu dgu sbyor,* and *byang khog grems kyi mdo,* see Sangs rgyas rgya mtsho, *Khog 'bugs,* 154-155.

medicine. Another important way of classifying Tibetan medical texts is by provenance. The Tibetan literary phenomenon of the revealed text (*gter ma*) is a classificatory rubric commonly opposed to a category of texts that are translations of Indian originals or admitted compositions of Tibetan scholars. Tibetan medical traditions since the eleventh century have participated fully in the Tibetan preoccupation with the provenance of important texts. Revealed texts important to medical traditions are found in the collection, *Storehouse of Precious Treasures* (*rin chen gter mdzod*), and in the revealed historical texts of the *Fivefold Testament* (*bka' thang sde lnga*), for example.[85] The most prominent such text in the medical tradition, however, is the *Four Tantras* itself.

The *Four Tantras* is still today considered the principal medical text in Tibetan medicine.[86] While the origins of this seminal text are uncertain, it seems to have been arranged in the definitive form we know today in the eleventh century by the famous Tibetan physician Yuthog Yonten Gonpo (*g.yu thog yon tan mgon po*, 1112-1203), probably following several centuries of development. While according to some historical traditions it is the translation of an Indian text, and according to others it is an indigenously Tibetan text, most scholars today agree that it must be indigenously Tibetan, but heavily influenced by Indian, Chinese, and other medical traditions.

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[85] Kalsang Trinley's history discusses the *terma* medical tradition, Skal bzang 'phrin las, *Bod kyi gso ba rig pa'i byung 'phel gyi lo rgyus*, 279-317. Also see Sangye Gyatso's discussion listing hundreds of revealed medical texts at Sangs rgyas rgya mtsho, *Khog 'bugs*, 183-201. For an introduction to treasure texts in Tibetan literature see Janet B. Gyatso, "Drawn from the Tibetan Treasury: The gTer ma Literature," in *Tibetan Literature: Studies in Genre*, ed. Jose Ignacio Cabezon and Roger R. Jackson (Ithaca: Snow Lion Publications, 1996).

[86] *Bdud rtsi snying po yan lag brgyad pa gsang ba man ngag gi rgyud*, (Delhi: Bod kyi lcags po ri'i dran rten slob gner khang, 1993). Also published by Lhasa: Bod ljongs mi dmangs dpe skrun khang; Bod-ljongs Sin-hwa dpe tshong khang nas bkram, 1982. For discussion of editions of the *Four Tantras*, see Bolsokhoyeva, *Introduction to the Studies of Tibetan Medical Sources*, 25-26; Barbara Gerke and Natalia Bolsokhoeva, "Namthar of Zurkha Lodo Gyalpo (1509-1579)," *AyurVijnana* 6 (1999); Meyer, "Introduction: The Medical Paintings of Tibet," 6.

The *Four Tantras* consists of one hundred and fifty six chapters arranged in four units, or "books": the *Root Tantra* (*rtsa rgyud*), cryptically summarizing the entire text; the *Explanatory Tantra* (*bshad rgyud*), with a description of the human body and general information about the causes of disease and the principles of therapeutics; the *Secret Oral Tantra* (*man ngag rgyud*), containing specific instructions and methods of diagnosis; and the *Concluding Tantra* (*phyi ma rgyud*), containing specific information about various types of treatments. The primary sources for the *Four Tantras'* view of human anatomy and physiology, from conception through death, are found in the first seven chapters of the *Explanatory Tantra.* Chapters two through six of that book consider how the body is formed (*grub pa lus gnas*); similes of the body (*'dra dpe phung po'i gnas lugs*); the structure of the body, somewhat analogous to what we call anatomy (*lus kyi gnas lugs*); characteristics of the body, somewhat analogous to what we call physiology (*lus kyi mtshan nyid*); and actions and classifications of the body (*lus kyi las* and *lus kyi dbye ba*), also roughly equivalent to physiology. Generally following the structure of Indian medical texts described above, the seventh chapter discusses signs of death (*lus kyi 'jig ltas*). After this point the remainder of the book consists of a general explication of causes and symptoms of disease and classifications and methods of therapeutics. The chapter on how the body is formed—the *Explanatory Tantra*'s second chapter—considers three main topics: the causes of formation of the body, the conditions that aid in the body's development, the sequence of the body's development, and the signs of impending birth. It is this chapter, and subsequent commentaries on it, that forms the basis for much of this dissertation's presentation of Tibetan medical embryology.

The *Four Tantras,* written in verse and presented in a format similar to that of many Buddhist tantras, is structured as a dialog between an emanation of the Buddha named Rigpe Yeshe (*rig pa'i ye shes*) and a student, Yilekye (*yid las skyes*). The Buddha is said to have taught the *Four Tantras* appearing as the Medicine Buddha in the place called Tanadug (*lta na sdug*), which may be Mount Meru or a "medicine jungle" in Uddiyana.[87] This mythical history is presented in the *Root Tantra* of the *Four Tantras* itself. At Tanadug, surrounded by his disciples, the Medicine Buddha is said to have fallen into a meditative state called "expelling four hundred and four diseases." Colored light rays radiating out from his chest eliminated diseases from all beings in all directions around him. The sage called Rigpe Yeshe then emerged from his chest and said,

> Friends, all those who wish that people should be healthy and live a long life and if they fall sick that they should be cured ought to learn the Science of Medicine. Because health is of the first importance in any undertaking; all those, too, who want to meditate and reach Nirvana and those who want wealth and happiness ought to learn the Science of Medicine.[88]

The sage Yidlekye then asked Rigpe Yeshe to teach medicine to the audience, and Rigpe Yeshe taught the *Four Tantras.* This view of the teaching of the text was supported by many Tibetan scholars thereafter. The seventeenth-century Mongolian scholar Jaya Pandita noted that both Zurkhars and also the Fifth Dalai Lama (*nga dbang blo bzang rgya mtsho,* 1617-1682) understood the *Four Tantras* to be the word of the Buddha.[89]

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[87] Kunzang, *Tibetan Medicine,* 10. Sangye Gyatso discusses the controversy over the location of Tanadug at Sangs rgyas rgya mtsho, *Khog 'bugs,* 55 onwards.

[88] Kunzang, *Tibetan Medicine,* 10.

[89] Taube, *Medizinischen Literatur Tibets,* 26-27. Taube refers to Dza ya panti ta blo bzang 'phrin las, *Chos kyi thob yig gsal ba'i me long.*

Sangye Gyatso states that, according to one tradition, Vairocana translated the *Four Tantras* in India with Dawa Ngonga (*zla ba mngon dga'*), and then brought the text back to Tibet and presented it to Padmasambhava, thereafter hiding it at Samye.[90] Winder speculates that the Tibetan translator Vairocana, commonly accused of bringing so-called "heretical" Hindu texts from India into Tibet in the eighth century, may indeed also have brought Indian medical texts, or text fragments, and hidden them at Samye. She comments that this claim may be supported by the fact that in the first book of the *Four Tantras*, Vāgbhaṭa's name appears in the lineage lines originating with the Medicine Buddha immediately before Vairocana's name.[91] According to this tradition, therefore, the *Four Tantras* was an early translation of a Buddha-voiced Sanskrit original, brought to Tibet and hidden at Samye, to be discovered later in a pillar by Drapa Ngonshe (*grwa pa mngon shes*), a "treasure revealer" born in either 1012 or 1033.[92] Drapa Ngonshe is said to have passed the text to Upa Dardrag (*dbus pa dar grags*), who was purportedly born in 1126, the same year as the famous twelfth-century physician, Yuthog Yonten Gonpo.[93] Upa Dardrag passed the text on to a figure named Konchog Kyabs (*rog ston dkon mchog skyabs* or *tsho byed dkon mchog*

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[90] Cited by Taube, *Medizinischen Literatur Tibets*, 27, ff 117. Vairocana's involvement in the medical tradition is discussed extensively by Sangye Gyatso in Sangs rgyas rgya mtsho, *Khog 'bugs*, 163-169. The identity of Dawa Ngonga is somewhat controversial—see my mention of this figure above.

[91] See Marianne Winder, "Introduction," in *Tibetan Medicine, Illustrated in Original Texts*, ed. Rechung Rinpoche Jampal Kunzang, Indian Medical Science Series No. 112 (Delhi: Sri Satguru Publications, 2001), 4. Also see Taube, *Medizinischen Literatur Tibets*, 28, ff. 119. It is also debated whether the translators were Vairocana and Pandita Zla ba mngon dga' from Kashmir (who is said to have been Vairocana's teacher), or Vairocana and "the teacher from Orgyan." See Taube, *Medizinischen Literatur Tibets*, 28.

[92] Sangye Gyatso locates an early identification of Drapa Ngonshe as the discoverer of the *Four Tantras* in the fourteenth-century biography of Padmasambhava, the *Pad ma bka' thang*. Sangs rgyas rgya mtsho, *Khog 'bugs*, 202.

[93] This scenario is presumably possible only if Drapa Ngonshe was born in 1033. Winder speculates that the dates were adjusted later to accord with the birth dates of other famous people—so, Drapa Ngonshe's birth was said to be 1012 because that is Marpa's birth date, and Dardrag's date was said to be 1126 because that is the date of Yuthog. See Winder, "Introduction."

skyabs),[94] who is responsible for giving it to Yuthog Yonten Gonpo.

Even among those who believe in the divine origins of the text, however, the details surrounding the transmission of the *Four Tantra* are controversial. According to some traditions, the twelfth-century Yuthog Yonten Gonpo edited, and probably expanded, the original *Four Tantras* core he had received, modifying the text into something resembling its present form. Sangye Gyatso wrote in the introduction of the *Blue Beryl* that "Yonten Gonpo checked (*zhus*) dark [passages] and published [the text]." In the fourth chapter he explains,

> There are many who regard these tantras as words [of the Buddha, or as related] commentary (*bka' bstan*). [To comment on this:] The nature (*ngo bo*) of the [*Four Tantras*] is in fact a [Buddha-]word... there is no doubt about that. But, Yonten Gonpo had to compare [the text] with works of Chinese astrology (*ngag rtsi*), in order to fulfill the spiritual prophesy (*lung bstan pa*) that stated, "It is necessary to enlighten the word meaning [of the Four Tantras] for the circumstances of Tibet." Therefore, throughout, at many places [of the work] we find non-Indian influences, in the form of words such as "tea," "porcelain," "mother-son [relation]," "friend-enemy [relation]," and so on. Based on those statements, scholars mistakenly regard [the *Four Tantras*] as a Tibetan manual. But [in fact] the above-mentioned Yuthog Yonten Gonpo only added single parts to the incomplete paragraphs of the original text (*rtsa*) of the *Four Tantras*, with the help of the *King of the Moon* (*zla ba'i rgyal po*), that was translated from Chinese, and others, for the purpose of adapting the

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[94] See Byams pa 'phrin las, *Gang ljongs gso rig bstan pa'i nyin byed rim byon gyi rnam thar phyogs bsgrigs (Medical biographies of Tibet in chronological order)* (Dharamsala: Tibetan medical and astrological institute, no date), 98-99. Konchog Kyab is discussed by Sangye Gyatso at Sangs rgyas rgya mtsho, *Khog 'bugs*, 182 and 206. Konchog Kyab is apparently also the author of one of the texts from the *Eighteen Additional Practices*, the *rtsod bzlog gegs sel*, a record of debates on the meaning of the root and branch and other theoretical aspects of medical theory; see Skal bzang 'phrin las, *Bod kyi gso ba rig pa'i byung 'phel gyi lo rgyus*, 319. This text is the sixth text in the *Eighteen Additional Practices*. See Gerke, "Authorship of 'Cha lag bco brgyad'."

> quintessence [of the *Four Tantras*] with [the situation of] Tibet. He added some parts to the *Four Tantras* (*bdud rtsi snying po yan lag brgyad pa (bsang ba) man ngag gi rgyud*), that is in the *Concluding Tantra* (*phyi ma rgyud*) and *Oral Tantra* (*man ngag rgyud*) numerous supplements, in the *Root Tantra* (*rtsa rgyud*) a number of chapters and in the *Explanatory Tantra* (*bshad rgyud*)[some] supplementary chapters etc...[95]

In his writing on the history of medicine in Tibet, the Mongolian scholar Jaya Pandita reported, however, that opinions differed quite dramatically among Tibetan scholars as to whether the *Four Tantras* was even spoken by the Buddha.[96] Sangye Gyatso describes an account from Padmasambhava's eighth-century *Testament* (*pad ma bka' thang*) in which the *Four Tantras* is said to have been translated from Chinese.[97] Sangye Gyatso also comments that the Indian origins were questioned in the fourteenth century by Bodong Chogle Namgyal (*bo dong phyogs las rnam rgyal*, 1375-1450),[98] and the mid-sixteenth-century medical history in the *Feast for the Learned* (*mkhas pa'i dga' ston*) is altogether silent on the issue of the translation of the *Four Tantras*, stating that the twelfth-century Yuthog Yonten Gonpo compiled the work himself "as Yilekye."[99] Taube cites the following opinion from the *Feast for the Learned*:

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[95] Cited by Taube, *Medizinischen Literatur Tibets*, 32. Translation by Taube and Gerke. This topic is also discussed at Sangs rgyas rgya mtsho, *Khog 'bugs*, 275.

[96] Dza ya panti ta blo bzang 'phrin las, *Chos kyi thob yig gsal ba'i me long*. See also Taube, *Medizinischen Literatur Tibets*, 5, ff. 2. Taube notes that ultimately Jaya Pandita himself supports the position of the *Four Tantras* being a later compilation based on earlier fragmentary sources.

[97] Sangs rgyas rgya mtsho, *Khog 'bugs*, 167. Sangye Gyatso refers to the *pad ma bka' thang* as the *thang yig* here.

[98] Taube, *Medizinischen Literatur Tibets*, 33. Marianne Winder points out that this claim is supported by the work of R.E. Emmerick, who has noted, for example, that in the thirteenth chapter of the *Explanatory Tantra*, 76 of the 100 lines correspond very closely to the Tibetan translation of Vagbhata's text. See Winder, "Introduction," 3. A short biography of Bodong Chogle Namgyal is present in Bla ma skyabs, *Bod kyi mkhas pa rim byon gyi gso rig gsung 'bum dkar chag mu tig phreng ba* (kan su'u mi rigs dpe skrun khang, 1997), 178-180.

[99] Taube, *Medizinischen Literatur Tibets*, 33.

> ...some regard the *Four Tantras* as the word of the Buddha himself; others believe that [the *Four Tantras*] was expounded by an incarnation of Sakya Wangpo (*sa skya'i dbang po*) himself, as likewise he also taught the Yogatantra, as embodiment of Vairocana on the summit of Mount Sumeru (*ri rab*); some consider [the *Four Tantras*] to be a "treasure" (*gter ma*), and [again others] think that a primary source (*rtsa*) of the *Four Tantras* existed, which was elaborated by Yuthog...[100]

Taube reports that the prolific Geluk author Longdol Lama (*klong rdol bla ma*, 1719-1794) also denies the possibility of a Sanskrit original. He notes additionally that Sumpa Khenpo Yeshe Paljor (*sum pa mkhan po ye shes dpal 'byor*, 1704-1788) rejects completely the notion of the *Four Tantras* as a revealed work at all, asserting that it is an originally Tibetan text composed on the basis of Indian and Chinese medical knowledge by either the eighth-century or the twelfth-century Yuthog Yonten Gonpo.[101]

Hoping to uncover the roots of this debate, Samten Karmay begins with the key figures in medical history in the eleventh century, a century before the first textual reference to the divine revealing of the *Four Tantras*.[102] Karmay reports that the first text to attribute divine origins to the *Four Tantras* is a text by Sumton Yeshe Zung (*sum ston ye shes gzungs*, dates unknown), a student of the twelfth-century Yuthog Yontan Gonpo, which is the first of three sub-documents within the twelfth text of the *Eighteen Additional Practices*, a

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[100] Ibid. Translation by Taube and Gerke.

[101] Ibid. Translation by Taube and Gerke. On Sumpa Khenpo, see TBRC Resource Code P339; also see Bla ma skyabs, *Bod kyi mkhas pa rim byon gyi gso rig gsung 'bum dkar chag mu tig phreng ba*, 271. The text referred to is the *chos 'byung dpag bsam ljon bzhang* (TBRC Resource Code W7667).

[102] Karmay, "Vairocana and the rgyud-bzhi," 20. See this article also for an alternative Bon tradition.

collection typically attributed uncritically to the twelfth-century Yuthog Yontan Gonpo.[103] Written in verse, it is a history of the *Four Tantras* lineage up to Yuthog that states that Vairocana received the text from Dawa Ngonga in Kashmir, and that the text was originally spoken by the Buddha Rigpe Yeshe in Uddiyana. The text states further that Vairocana presented it to King Trisong Detsen (*khri srong lde btsan*), who hid it in a pillar at Samye until, one hundred and fifty years later, it was recovered by Drapa Ngonshe. Karmay reports that the account from this text subsequently became the orthodox view of the *Four Tantras'* origins. Still, however, it is odd that the comprehensive fifteenth-century Tibetan history, the *Blue Annals,* does not mention Drapa Ngonshe's discovery of the *Four Tantras* or any other texts, nor is this event mentioned in an early biography of Drapa Ngonshe reported on by the sixteenth-century Nyingma author Sodopa Lodro Gyaltsen (*sog zlog pa blo gros rgyal mtshan,* 1552-1624).[104]

As for the tradition of attributing authorship of the *Four Tantras* to the twelfth-century Yuthog Yontan Gonpo himself, Karmay explains that this tradition originates with the text entitled *History of Yuthog Lineage Masters* (*gyu thog bla brgyud lo rgyus*), cited in works by Sodopa Lodro Gyaltsen and Sangye Gyatso, likely authored by one of Yuthog's

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[103] This is the *rNam thar bka' rgya cen,* also known as *sKu lnga lhun grub ma* and *rNam thar med thabs med pa.* See Ibid.: 28, ff. 5.

[104] Noted in Ibid.: 21. From *rgyud bzhi'i bka' bsgrub nges don snying po,* in tha, 213-241, v. 2, in *Collected writings of Sog-bzlog-pa Blo-gros-rgyal-mtshan. Reproduced from a unique but incomplete manuscript from the library of Bdud-'joms Rin-po-che.* (New Delhi: Sanje Dorji, 1975), Vol No 9, 235. (The text is annotated: "On the authenticity of the Rgyud bzhi, the four Tibetan medical tantras; written at the behest of Dpon-tshang Bsod-nams-rnam-rgyal.")

students but, unfortunately, not extant today.[105] With the twelfth- and thirteenth-century writings of Yuthog's students—at least one of whom is known to promote the notion of divine authorship, and another believed to promote human authorship—Karmay reports that distinct schools formed immediately around disparate commentarial traditions on the *Four Tantras.*

The first of these, the thesis of the text's Indian origins, known as the "establishment of the *Four Tantras* as a canonical work" (*rgyud bzhi bka' ru bsgrub pa,* or simply, *bka' sgrubs),* is part of nearly every work of the medical history (*khog 'bubs*) tradition. These texts dealing with the historical development of Tibetan medicine are part of a genre that began with the *Eighteen Additional Practices'* first text, the *Soaring Garuda* (*kyung chen lding pa*), which is attributed by some to Yuthog himself and by others, to his students.[106] As for the second position, Karmay states that early texts promoting the thesis of the *Four Tantras'* human authorship, designated *rtsod yig,* are now very rare, existing primarily only as citations in other texts. He names the central proponents of this position as Bodong Chogle Namgyal and Tagthang Lotsawa Sherab Rinchen (*stag sthang lo tsa ba shes rab rin chen,* b. 1405).[107] Karmay summarizes a fifteenth-century *rtsod yig* argument that provides sixteen points required to prove that the *Four Tantras* is a Tibetan work, and he observes that they take into account issues of "religion, history, linguistics, popular beliefs, customs, habits, diets, botany

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[105] Karmay points to references to the text, the complete title of which is *gYu thog bla sgrub kyi lo rgyus nges shes 'dren byed dge ba'i lcags kyu,* in: *rgyud bzhi bka' bsgrub,* by Sog zlog pa, pg 232; Sangye Gyatso's *Khog 'bubs* (Kansu 1982, pg 280); and Sangye Gyatso's *Blue Beryl* (Lhasa 1982, smad cha, pg 1557).

[106] For more on the authorship of this text, see Gerke, "Authorship of 'Cha lag bco brgyad'." Karmay also points out that because the text itself refers to the *rNam thar bka' rgya cen* by Sumton Yeshe Zung, it naturally cannot predate that text.

[107] Karmay, "Vairocana and the rgyud-bzhi," 22.

as well as utensils, medical or otherwise."[108]

Karmay concludes that while the debate was contentious, those who claimed the *Four Tantras* to be a largely Tibetan work proved most influential ultimately, although this view was commonly tempered with the assertion that Yuthog authored the text in the divine form of Yilekye. Despite the text's self-identification as divine revelation, and the acceptance of many prominent scholars of this view, the question of the origins of the *Four Tantras* comes to light as one of the most contentious topics through centuries of writing on Tibetan medical history. Nonetheless, it seems most likely that the version now extant began with early core elements that were inherited from India around which additional segments grew over time in Tibet.

II. b. Commentaries on the Four Tantras

After the *Four Tantras* became widely known in the twelfth century it began to amass a vast commentarial literature, with such compositions continuing to the present date. Taube notes that the literature index by Akhu Rinpoche (*a khu rin po che shes rab rgya mtsho*, 1803-1857) mentions sixteen commentaries on the entire *Four Tantras*, plus eight devoted solely to the *Root Tantra*, nine to the second tantra, two to the third tantra and twelve to the fourth.[109] The following texts, presented from historically earliest to most recent, are the main extant commentaries on the *Four Tantras* that contain analyses of the text's chapters on embryology and adult anatomy and physiology—that is, commentaries on the *Explanatory Tantra*. As I have discussed earlier, there are numerous early and late commentaries on other

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[108] Ibid.: 23. Karmay's article should be consulted for a discussion of this debate.
[109] Taube, *Medizinischen Literatur Tibets*, 37.

topics, such as pharmacology and nosology, from the *Four Tantras*, as well as many early and late original medical texts that address other topics; here, however, I will consider only those texts that directly speak to the development and structure of the human body in an organized and deliberate way.

II. b. i. Explanatory Tantra commentaries from the period of the Four Tantras

The earliest commentaries on the *Four Tantras* date to the time of the twelfth-century Yuthog himself. Two of the eighteen texts that form the twelfth- or thirteenth-century collection known as the *Eighteen Additional Practices*—the second text and the fifth text—are commentaries on the *Four Tantras' Explanatory Tantra.* Barbara Gerke's article on the *Eighteen Additional Practices* notes that this collection was influential for roughly five hundred years, but by the mid-seventeenth century it seems to have declined in popularity, perhaps due to Desi Sangye Gyatso's negative evaluation of it. Although some Tibetan scholars attribute the entire collection to the twelfth-century Yuthog Yonten Gonpo, there is a divergence of opinion among later Tibetan historians over who actually authored each of the eighteen texts. Most of them are likely to have been authored by Yuthog's students, as in fact the colophons state, although one text may have been authored by one of Yuthog's teachers, dating this collection to a range from the mid-twelfth century to the mid-thirteenth century.[110] The two *Explanatory Tantra* commentaries in this collection are quite sparse and add very little to the *Four Tantras'* account of psychosomatic development or physiology. As we will see in later chapters, what these texts do not say is often more interesting than what

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[110] Gerke, "Authorship of 'Cha lag bco brgyad'." Sangye Gyatso discusses the texts' authorship at Sangs rgyas rgya mtsho, *Khog 'bugs*, 277-278.

they do say.

Another early *Explanatory Tantra* commentary, from the period just after Yuthog Yonten Gonpo's lifetime, probably the mid- or late-thirteenth century, is extant today. This text was authored by one of Yuthog's students, Sumton Yeshe Zung (*sum ston ye shes gzung*, dates unknown), a figure who is also said to have authored several of the texts in the *Eighteen Additional Practices* collection.[111] The commentary on the *Explanatory Tantra*'s chapter on embryology in this text is also very sparse, adding little significant detail. Following the organizational scheme of the second chapter of the *Explanatory Tantra*, Sumton Yeshe Zung addresses the causes of conception, the conditions for fetal growth, and the signs of birth. His explanation of causes of conception is divided further into four subsections, a taxonomy that is not inherent to the *Four Tantras* itself: the causes of conception; defects that result in inability to conceive; how conception occurs in the womb; and a teaching on the generation of causes from effects.

II. b. ii. Explanatory Tantra commentaries from the fifteenth century onwards

I know of no extant commentaries that can be definitely dated to the fourteenth century, but from the mid- to late-fifteenth century, several major commentaries were composed by some of the chief figures in medical history. Two of the most often utilized commentaries from this period will be the central commentarial sources in this dissertation.

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[111] This figure is discussed by Sangye Gyatso at Sangs rgyas rgya mtsho, *Khog 'bugs*, 285-289. His texts is Dzanya na dha ri (sum ston ye shes gzung), *Bshad rgyud 'grel pa 'bum nag gsal sgron* (pe cing: mi rigs dpe skrun khang, 1998).

First of these is the *Four Tantras Commentary,*[112] written in 1479 by the famous physician Kyempa Tsewang (*skyem pa tshe dbang,* dates unknown), a text still used by Tibetan medical students today. Kyempa Tsewang begins his commentarial discussion of the formation of the body by dividing his discussion into a presentation of "the support," which is the mind, and "the supported," the body. He summarizes a Buddhist description of mind, and then moves to a commentary on the *Four Tantras* exchange between Yilekye and Rigpe Yeshe, beginning as the *Four Tantras* does with a summary of the seven topics discussed in the context of the teaching on the body. His commentary is thus structured by the *Four Tantras'* seven chapters: the manner of formation, similes of the body, anatomy, physiology, classifications and actions, and signs of death. The section on how the body is formed is subdivided into teachings on the manner of conception, the causes of fetal growth, and signs of birth. Topics that arise in these discussions include the role of karma and the natural elements in successful conception and fetal development; disorders of the reproductive substances that may prevent conception; the mechanics of menstruation; sexual definition of the embryo; the sequence of fetal growth; rituals that ensure the generation of a male fetus; recommended behavior for the pregnant woman; and a summary of tantric accounts of fetal development.

Secondly, composed nearly a century later, the *Transmission of the Elders,*[113] by Zurkhar Lodro Gyalpo (*zur mkhar blo gros rgyal po,* 1509-1579), is the most famous medical

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[112] Skyem pa tshe dbang, *Rgyud bzhi'i rnam bshad* (zi ling: mtsho sngon rigs dpe skrun khang, 2000). This text is generally referred to in Tibetan with the abbreviated name *skyem 'grel.*

[113] Blo gros rgyal po, *Mes po'i zhal lung,* 4 vols. (Leh: T. S. Tashigang, 1980-1985). Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung.* Page numbers in this dissertation will refer to the 1989 edition. Gerke and Bolksokhoyeva noted that recent editions of the text have been reorganized for modern medical students after the structure of the *Four Tantras;* the original chapter structure of the text, which does not follow the model of the *Four Tantras,* is recorded in Taube, 63. Gerke and Bolsokhoeva, "Namthar of Zurkha Lodo Gyalpo (1509-1579)," 35.

work of the Zurlug school, or Southern Tradition, of Tibetan medicine. This text is also widely used by medical students today. Lodro Gyalpo's sophisticated commentary draws on medical knowledge and philosophical debates from a variety of schools of Tibetan medical and religious thought, using Tibetan sources dating back to the eleventh century and Indian sources as well. Like Kyempa Tsewang, Lodro Gyalpo's presentation of embryology organizes discussion into three large sections on conception, fetal development and growth, and signs of birth, and he comments on many of the same topics as Kyempa Tsewang, although generally with a much more detailed and critical attention to other texts and their similar or varying views. Many of the opposing positions noted in this text are references to a commentary by Jangpa Namgyal Drapa Zangpo (*byang pa rnam rgyal grags pa bzang po*, 1395-1475), the founder of the Jangpa school, or Northern Tradition, placing the two texts in direct dialogue.[114] Lodro Gyalpo is said to have drawn heavily on the *Heart Essence of Yuthog* (*g.yu thog snying thig*), a collection that integrates theoretical medical studies with religious meditation practices.[115]

Not all commentaries on the *Four Tantras* were composed by individuals known primarily as physicians, as are those figures described above. For instance, the prolific sixteenth-century Kagyu author Padma Karpo (*pad ma dkar po*, 1527-1592), the regent Tenpe Gonpo (*bstan pa'i mgon po*, 1760-1810), and Mipham (*mi pham rgya mtsho*, 1846-

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[114] This commentary, the *bshad rgyud kyi 'grel chen bdud rtsu chu rgyun*, was recently published in the PRC in a new series of Tibetan medical classics, some of which are quite rare. I have not had time to evaluate this text for this dissertation, although I intended to do so prior to publication. Byang pa rnam rgyal grags pa bzang po, *Bshad rgyud kyi 'grel chen bdud rtsi'i chu rgyun*, pod kyi gso rig dpe rnying phyogs bsgrigs, no. 2 (si khron mi rigs dpe skrun khang, 2001).

[115] Mkha' spyod dgyes pa'i rdo rje (19th c.), ed., *G.yu thog snying thig skor (g.yu thog snin thig gi yig cha : the collected basic texts and ritual works of the medical teachings orally passed from g.yu-thog yon-tan-mgon-po)*, ed. (Arranged and largely restructured by khams smyon dharma senge) (Leh: D. L. Tashigang, 1981).

1912)—all renowned authors of Buddhist philosophical texts—wrote commentaries on the *Four Tantras* as well.[116] One of the most influential of these was the commentary known as the *Blue Beryl*, completed in 1688. This text was authored by Desi Sangye Gyatso (*sde srid sangs rgyas rgya mtsho*, 1653-1703/5), the prolific regent of the Fifth Dalai Lama, founder of the Chakpori (*lcags po ri*) medical college in Lhasa, and commissioner of a famous series of medical illustrations (*thang ka*).[117] This text contains a critique of the *Eighteen Additional Practices* that appears to have resulted in a drastic decline in the latter text's popularity. Much of the *Explanatory Tantra* commentarial portions of this text follows the *Transmission of the Elders* very closely.

III. Tibetan religious texts featuring embryology

Spanning many centuries and a wide range of literary sub-genres, Tibetan religious texts that feature embryological detail are found across the various sectarian classifications of Tibetan Buddhism. As we will see in the chapters to come, embryological accounts in these texts are generally different in both structure and content than those found in the medical commentaries described above, and they differ widely from each other as well. Gampopa (*sgam po pa bsod nams rin chen*, 1079-1153), for instance, a disciple of Milarepa and the founder of the Tibetan Buddhist Kagyu (*bka' rgyud*) lineage, known for combining the early

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[116] Padma dkar po, "Rgyud bzhi'i 'grel pa gzhan la phan dter bzhigs so," in *Collected Works of Kun mkhyen padma dkar po* (Darjeeling: Kargyud Sungrab Nyamso Khang, 1973), 346-348. Bstan pa'i mgon po, *gso rig rgyud bzhi'i bshad rgyud las 'jug pa bde phyir sman byin rlabs zur du phyung ba nang rgyu dug gsum rtsad nas 'byin pa'i bdud rtsi* (khi. 9 ff. in vol. 2 of the 2 vol. printed edition in the Potala; TBRC Resource Code P302).

[117] The *Blue Beryl* is published as Sang rgyas rgya mtsho, *Gso ba rig pa'i bstan bcos sman bla'i dgongs rgyan rgyud bzhi'i gsal byed bai durya sngon po'i malli ka zhes bya ba bzhugs so*, 2 vols. (Dharamsala: Tibetan Medical & Astro Institute, 1994). The medical thangkas referred to here are published in Dorje and Meyer, eds., *Tibetan Medical Paintings*.

Tibetan Buddhist Kadam (*bka' gdams*) teachings with tantric teachings of the Indian *mahāsiddhas*, wrote on embryology in his *Jewel Ornament of Liberation*.[118] Although Gampopa is known to have been a medical scholar in his younger years, we will see in later chapters that he does not acknowledge medical models of embryology at all in the *Jewel Ornament*. (Among other things, this observation may call for a revision in our understanding of what was meant in those days to call someone a "doctor.") While he does rely on aspects of the Indian Buddhist *Entry into the Womb* sūtra, we will see that his text is otherwise quite unlike any other early account of embryology.

During the eleventh and twelfth centuries in Tibet, there was a great proliferation of commentarial literature based on the Buddhist tantras. Some of this material was concentrated into the related literary genres known as the "stages of the [Buddhist spiritual] path" (*lam rim* or *lam 'bras*). The stages of embryogenical development are very commonly found in texts of this type. This "stages of the path" genre, which became extremely important in the history of Tibetan literature over the centuries, is associated with Atiśa (982-1054) and the Tibetan Buddhist Kadam sect founded by his main disciple. These types of texts outline a sequential path of Buddhist practice, arranging the main schools of thought and practice along a graded path. For most such texts, tantric practices are placed at the highest stage of the path, and it is here that embryology is utilized. In chapter four, I will hypothesize that one of the reasons that Tibetan religious writers found embryological narratives particularly compelling may have to do with their easy affiliation with the structure and purpose of this increasingly popular literary genre on the Buddhist path.

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[118] *Dam chos yid bzhin nor bu thar pa rin po che'i rgyan* (sde dge: sde dge par khang chen mo, 1998).

An early example of such a text, the *Great Jeweled Wishing Tree,*[119] is by Drapa Gyaltsen (*grags pa rgyal mtshan,* 1147-1216), a remarkably prolific scholar of the Tibetan Buddhist Sakya (*sa skya*) sect, and a contemporary of Yuthog Yonten Gonpo. Drapa Gyaltsen was the third great scholar from the remarkable 'Khon family and a Sakya throne holder. He was the author of many texts on numerous subjects, including at least one medical text.[120] The *Great Jeweled Wishing Tree,* the first of Drapa Gyaltsen's texts in an edition of his collected works, is one of his most important religious texts. This *lam 'bras* work is one of the longest early Sakya esoteric texts. Drapa Gyaltsen's embryology begins with a summary of the traditional Buddhist four types of rebirth—miraculous, egg-born, moisture-born, and womb-born—and an explanation of the causes of conception. His account of embryonic development addresses both coarse and subtle body aspects, and it precedes a detailed explanation of the psychosomatic tantric anatomy of maṇḍalas, circulatory channels, and winds. In chapters to come we will see that Drapa Gyaltsen's account of embryology differs greatly from medical or sūtric models: his presentation of conception ignores the role of the natural elements; his descriptions of gestation and adult physiology do not mention the three humors; and he disregards the role of many of the energetic winds considered so essential by other writers to the growth of the body.

Another important religious text that serves as a source for Buddhist embryological

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[119] Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," in *The Complete Works of Grags pa rgyal mtshan,* ed. bsod nams rgya mtsho, Sa skya bka' 'bum (The Complete Works of the Great Masters of the Sa skya Sect of the Tibetan Buddhism), vol. 3 (Tokyo: The Toyo Bunko, 1968). I am grateful to Ronald Davidson for referring me to this text (email communication, 2000).

[120] Rje btsun grags pa rgyal mtshan, *gso dpyad rgyal po'i dkor mdzod* (kan su'u mi rigs dpe skrun khang, 1993). This work is discussed by the contemporary medical historian Kelsang Trinley in his *bod kyi gso ba rig pa'i byung 'phel gyi lo rgyus gsal bar ston pa baidurya sngon po'i shun thigs,* 314-317.

thought is the *Profound Inner Meaning* (*zab mo nang don*), a text on yogic physiology and practice by Rangchung Dorje (*rang byung rdo rje*, 1284-1339).[121] A summary of fourteenth-century Tibetan Buddhist Kagyu views on the tantric body, this text contains twelve chapters, including topics such as the conception and formation of the body; explanations of the locations, functions, and movements of the channels, winds, and quintessential essences; the relationship of these to the consciousness; the link between the inner body and the external world; and the use of the subtle body features in contemplative practice. This text was highly influential for medical thinkers after the fifteenth century, and it is a commonly cited source in the important sixteenth-century *Four Tantras* commentary by Lodro Gyalpo.

A half-century later, the important scholar Longchenpa (*klong chen 'rab 'byams pa*, 1308-1364), from the Tibetan Buddhist Nyingma (*rnying ma*) sect, also included long embryological accounts in some of his religious writings, sometimes correlating the ten months of embryogeny with the religious practitioner's spiritual development along the ten *bodhisattva* levels. His *Treasury of Precious Words and Meanings*[122] involves a presentation of tantric paradigms of Buddhist enlightenment that relies on rhetorical and poetic uses of language and traditional Buddhist symbols in distinctive ways.[123] This text ignores completely the structure of the *Four Tantras* or other known early medical embryological

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[121] Rang byung rdo rje, *Zab mo nang don zhes bya ba'i bzhung gzhugs* (Sikkim: Rumtek Karma chos sgar, 1970?).

[122] Klong chen pa, *Tshig don mdzod*, Mdzod chen bdun (Gangtok, Sikkim: Sherab Gyaltsen and Khyentse Labrang, 1983). The *tshig don mdzod* is translated in David Germano, *The Treasury of Words and Meanings* (9/13/94 manuscript). My discussion of Longchenpa's work in this article relies upon Germano's extensive research, and I am exceptionally grateful to him for generously sharing his manuscripts.

[123] David Germano reports that recently discovered early Nyingma texts suggest that much of Longchenpa's writings in fact largely duplicate earlier Nyingma works, suggesting a much earlier provenance for this embryological presentation. I have not yet had the opportunity to examine these earlier sources.

sources, nor does it consider any of the most important embryological topics in those texts. Indeed, the structure of his presentation bears only a faint resemblance to other tantric texts. Longchenpa organizes this text into eleven main headings, an organizational structure later adopted by others in Longchenpa's tradition. The eleven headings include an explanation of the origins of the universe (topic one), an account of the origin of the human individual (topic two), a detailed description of human psycho-physiology (topics three through six), discussion of a series of yogic practices and signs that these are being performed successfully (topics seven through nine), analysis of the phases of death and postmortem existence (topic ten), and finally a study of enlightened experience (topic eleven). Chapters that focus on human psycho-physiology describe the individual's enlightened essence, or "Buddha-nature," the tantric physiological structure by which this enlightened essence circulates throughout the body, and the four "lamps" that allow this essence to exit the body through the eyes into external space. The enlightened essence that has left the body in this way is thus the object of a series of contemplative practices prescribed in subsequent chapters, and I will discuss later how elements of this distinctive contemplative system are reflected in Longchenpa's embryology.

Over the next several centuries, as medical scholasticism began to expand rapidly, embryology continued to play an important role in philosophical and religious literature as well. In the early literary scholasticism of the highest yoga tantra tradition of the Tibetan Buddhist Geluk (*dge lugs*) sect embryology played a significant role, as it does up to the present date. In this tradition, advanced contemplative practices are specifically aimed at

stopping death and rebirth through a series of practices explicitly modeled after the actual processes of death, the state of postmortem existence, and rebirth.

While the preceding survey only skims the surface of Tibetan religious literature in which embryology appears, it should be clear already that it is a topic featured by religious thinkers of all sectarian affiliations. Many Tibetan-authored texts and literary collections not mentioned here were also important sources for early embryological and physiological topics in Tibetan religious and medical literature. The *Heart Essence of Yuthog*, for example, mentioned above, is a ritual text passed over many centuries through lineages of medical scholars to the present date. The *Heart Essence of Yuthog* has two sections, one on theoretical religious concerns (*chos skor*), with eight chapters describing various initiations (*dbang*), and one focused on practices (*gdams skor*), with nine chapters providing instructions for ritual performances. The seventeenth-century historian Jaya Pandita attributes the text to both Yuthog and his student Sumton Yeshe Zung, with some chapters authored later by Zurkhar Nyamnid Dorje (*zur mkhar mnyam nyid rdo rje*, b. 1439).[124] The *Six Doctrines of Naropa* (*naro chos drug*), a sequence of texts widely studied during the eleventh and twelfth centuries was also an influential source for those who studied and wrote on human physiology. In the Nyingma tradition, the eleventh-twelfth-century *Seventeen Tantras* (*rgyud bcu bdun*), and the eighth-twelfth-century *Collected Tantras of Vairocana* (*vairo rgyud 'bum*), two important collections from the Nyingma Heart Essence (*snying thig*) tradition, were prominent sources in the development of Tibetan formulations of the body and contemplative and healing

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[124] Taube, *Medizinischen Literatur Tibets*, 57. For a list of lineage holders of the *Heart Essence of Yuthog* tradition, see Gerke and Bolsokhoeva, "Namthar of Zurkha Lodo Gyalpo (1509-1579)," 28; Taube, *Medizinischen Literatur Tibets*, 66. Also see Meyer, "Introduction: The Medical Paintings of Tibet."

practices that focused on the body. The chapters to follow will comment on the contributions of some of these sources, although a full accounting of the many, many Tibetan texts that address embryology is well beyond the scope of this dissertation.

It is clear not only that embryology in Indian, Chinese, and Tibetan literature was widespread in occurrence but also that it addressed a great range of topics of interest and importance to literate communities on the whole. In the following chapters, I will consider embryology as a vital and creative venue for addressing life's most fundamental questions about identity, responsibility, and personal creativity. Each chapter will demonstrate how embryology is linked to issues of fundamental importance in Buddhism: to the Buddhist concern with corporeal taxonomies, to central topics in Buddhist cosmology and astrology, to Buddhist soteriology, to the centrality of karma and Buddhist ethics, and to the complexities of Buddhist doctrine and practice.

CHAPTER 3. EMBODIMENT IN EMBRYOLOGY

In a paper called "The Narrative Emergence of Identity," psychologist Mark Gover distinguishes between an individualist conception of narrative and a sociocultural conception of narrative.[125] Theories of narrative individualism presuppose a dualism between the self and the world and a correspondence view of language, he writes; underlying such an ontology is a belief in the fundamental reality of "a knowable world of things and events" that can be accurately represented by language, and an understanding that the self is identified as separate from this "external" world. For such theorists, Gover explains, narrative transparently expresses a bounded, internal self. "The narrative becomes the conduit by which a private self is made public," and the meaning of the narrative exists ultimately in the mind of the narrative's author. In this model, "the individual remains the valued site for the ultimate realization of personal narrative as well as for our understanding of how narrative relates to issues of identity."[126] By contrast, in a sociocultural conception of narrative individualism, Gover explains, "mental phenomena, among other things, are understood as constituted by (that is, not merely *influenced* by) their cultural, historical, and social contexts, contexts which themselves are deeply and fundamentally human."[127] This chapter will address the central subject—the main character—in Tibetan narratives of embryology. I will

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[125] Mark R. Gover, "The Narrative Emergence of Identity," in *Proceedings of the Fifth International Conference on Narrative, October 18-20, 1996*, ed. J. Knuf (Lexington, Kentucky: College of Communication and Information Studies, University of Kentucky, 1998). This article is available at http://www.msu.edu/user/govermar/narrate.htm, and because the print edition was impossible to obtain it is the online edition that I have consulted here. For this reason I omit page numbers in my citations.

[126] Ibid.

[127] Ibid.

consider Gover's notion of the absorption of sociocultural conceptions of the self into narrative theory, an argument that emphasizes the role of narrative in the construction of a continuous, subjective identity. Contending that an analysis of Tibetan embryology suggests that narrative and identity mutually constitute one another, my examination of how embryological narratives are involved in identity formation will reveal a theory not of a single, fixed identity, but of a fluidity of various identities. Despite this flexibility, however, we will see over the next several chapters that the notion of identity expressed through embryology has repeatable characteristics, including an integral relationship with temporality, and social, affective, and ethical dimensions.

The primary question for this chapter and the next is, Who are the characters in narratives of embryology? Tibetan embryologies can be interpreted on various levels, and embryological narratives are written for various fictional and real audiences. While on one level the main character is clearly the developing embryo, in some narratives the embryo is a symbol for the Buddhist practitioner. Before addressing this symbolic main character—the topic of chapter four—I will first consider, in this chapter, how the literal main character—the embryo itself—is described. Most generally, of course, the embryo is a body, or, at least, at some point mid-way along the gestational process, it is a body with limbs, skin, facial features, sexual characteristics, mental attitudes, and so forth. In chapter one I commented that there is, in fact, no single term for what we call the "embryo" in Tibetan: "embryology" is simply "how the body is formed" (*lus gyi chag tshul*). Although Buddhist theorists have generated tomes of scholarship on the classification and functions of various aspects of mind

or mentality—a topic clearly separate in Buddhism from the study of the body—embryology is, on the most literal level, explicitly focused on the development of the body. What it is that embryological narratives allowed Tibetan narrators to say about the body?

I. Theories of the body in Indian Buddhism

Medical systems are inescapably concerned with the human body. Certain forms of Tibetan *religious* discourse during this period are likewise quite centrally focused on the human body. Viewing the body as a system of meaning, and not simply a biological substance, enables us to see how a system of moral relations, for instance, played out in medical practices, creates the human body. Thus I begin with the presupposition that the human body works as a vehicle for the organization and expression of beliefs about the nature of human beings and their place in the social and cosmic order. This approach, although familiar in other disciplines interpreting the body, is new for the scholarly study of Asian medical traditions. For example, according to a noted scholar of Hinduism, Gerald Larson, in an article entitled "The Concept of Body in Āyurveda," the Āyurvedic body is a primarily what he calls a "biological" body.[128] This view represents a pervasive attitude in studies of Asian medical systems: such writers assert that the body addressed in Āyurveda or other health-care systems is a material entity in need of treatment that can be understood no differently than bodies of the twentieth-century medicalized western world. By this account, physical bodies exist across the world and throughout history exactly as Euro-American scientists know them to today. This view understands "bodies" to exist independently of

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[128] Larson, "The Concept of Body in Āyurveda and the Hindu Philosophical Systems."

culture, language, history, or lived experience, and proponents of this view see the skin as the absolute boundary of the body.

But skin is permeable. A more contexualized understanding of the body thus allows us to see that, in fact, Buddhist authors throughout history have creatively used the vocabulary of embodiment in a wide-ranging way to convey subtle philosophical and psychological messages about Buddhist doctrine and the possibility for enlightenment. In the latter part of this century, many academic disciplines in European-derived traditions have questioned our own understanding of the body, pointing to the historical and social specificity of notions of embodiment and calling for a revision of the Cartesian mechanization of the body. For cultural theorists if not scientists, what is meant by the term "body" is no longer a given, as thinkers struggle to identify the philosophical, social, and political influences governing the relationship between bodies and minds and their particular modes of contextualization. Buddhist authors in Asia have been grappling with similar questions for centuries. Buddhist philosophical texts explicate the multidimensional experience of embodiment using myriad terms—ordinary body, gross temporary body, subtle fundamental body, illusory body, pure illusory body, truth body, form body, rainbow body, and *vajra* body. These traditions enjoy a rich vocabulary for conceptualizing modes of embodiment, and they use various images, symbols, metaphors, and representations of the body to construct various forms of subjectivity.

Early Indian Buddhism advocated numerous practices aimed at generating a sense of aversion toward impermanent phenomena as a means of gaining insight into the nature of

saṃsāra. The ordinary human body was a common object of meditation in this effort, and meditative techniques promoted an awareness of the body's defiled nature. Many of the Buddha's earliest teachings involved instruction on the foulness of the human body, and to this end monks were sent to burial grounds to contemplate rotting corpses. For each of thirty-two parts of the body, for instance, Buddhaghosa outlined five forms of loathsomeness for contemplation. The human body in these early texts was graphically described as a putrid, leaking boil with nine openings:

> This boil, monks, is an apt metaphor for the body which is made up of the four great elements, begotten of mother and father, formed from a heap of boiled rice and sour gruel, subject to impermanence, concealment, abrasion, dissolution, and disintigration, with nine gaping wounds, nine natural openings, and whatever might ooze out from this, foulness would certainly ooze out. Therefore, monks, you should be disgusted with this body.[129]

Such instructions were presented to meditators combating the negative emotion of desire. Ubiquitous in early Indian writings, such views of the ordinary human body were also offered by later Mahāyāna thinkers. In the *Bodhisattvacaryāvatāra,* for instance, Śāntideva advocates recognition of the likeness of the ordinary body to a corpse:

> Seeing a skeleton that does not even move, you are terrified,
> Why aren't you frightened by a walking corpse animated by a *vetāla*?
> You are disgusted by skeletons in the cremation ground,
> But you enjoy yourself in the cremation ground that is the village filled with walking crowds

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[129] Liz Wilson, *Charming Cadavers: Horrific Figurations of the Feminine in Indian Buddhist Hagiographic Literature* (Chicago: University of Chicago Press, 1996), 51. On the early Indian ascetic's knowledge of the human body, see also Zysk, *Asceticism and Healing,* 34-37.

of skeletons![130]

Embodiment was not viewed negatively in all forms of Buddhism, however, and a proliferation of theories of embodiment described bodies of all types as Buddhism diversified across Asia. Prominent among these is the doctrine of the spiritual bodies of the Buddha, a scheme in which the Buddha manifests as either a "Form Body" (*gzugs sku,* Skt. *rūpa kāya*) or a "Reality Body" (*chos sku,* Skt. *dharma kāya*), where the former is metaphysically the Buddha's profound realization, and the latter is the Buddha's manifested physical and verbal existence in the world of sentient beings. This doctrine is also configured as three bodies: the Form Body is subdivided into an Enjoyment Body (*longs sku,* Skt. *sambhoga kāya*), an idealized manifestation of the Reality Body as a teacher in a Pure Land, and the Emanation Body (*sprul sku,* Skt. *nirmāṇa kāya*), which appears in the flesh in the ordinary world of sentient beings. With tantric traditions, the ineffable reality of the Buddha's enlightened realization was internalized within every sentient being; according to this doctrine, even sentient beings possess an enlightened "Buddha nature."

Indeed, the taxonomy of embodiment is a central feature of Buddhist doctrine and practice throughout history and across Asia. In Buddhist traditions some beings are materially embodied, and others are embodied as mind or as light. Bodies are gross or subtle; male, female, or neuter; physically normal or abnormal. The Buddhist three body theory describes three aspects of enlightened embodiment: the Reality Body is formless and abstract, and it is the source of the Emanation and Enjoyment Bodies; the Emanation Body is a

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130 Wilson, *Charming Cadavers: Horrific Figurations of the Feminine in Indian Buddhist Hagiographic Literature,* 56.

Buddha in human form; and enlightened bodhisattvas, often residents of a Pure Land, possess Enjoyment Bodies. Even deities take on bodies that are semantically coded as good or evil—bodhisattvas have distinctively superior bodies, often of exceptional beauty and supernatural physical and mental ability. Buddhist cosmology, defining six realms of rebirth according to what type of body one receives, describes the bodies of hell beings, hungry spirits, animals, humans, demi-gods, and gods. And always, Buddhist embodiment is wholly moralized—there are bad bodies (animals, hungry ghosts, or women), good bodies (male humans, bodhisattvas), and best bodies (a Buddha's body). Within this wide arena of modes of incarnation, how did embryology contribute to the taxonomy of embodiment?

Scholars of Buddhism commonly contrast the focus on negative depictions of the human body characteristic of early Buddhist practices, with the comparatively valued status of the human body in tantric meditation practices. Some have further pinpointed attitudes toward the body as the locus of the intersection of medical theory and Buddhist doctrine. In this chapter, I will ask what Tibetan writers said about embodiment through the medium of embryology. By examining the identity of the main character of embryological narratives, I will consider how embryological narratives are used by Tibetan medical and religious authors to describe, or prescribe, models of human identity, and to question how individuals differentiate themselves from others.

In the course of examining what Tibetan embryological narratives have to say about the human body and human identity, I will outline the general features of two Tibetan theories of physiology: that of Tibetan medical texts, which in many respects are modeled

closely after Indian medical texts, and that of Buddhist tantric texts, also inherited from India. In this survey I will focus on two aspects of physiology. The first, which describes the body's digestive physiology, its geometric semantics, and its humoral organization, is a functional and interactive presentation of the body that is emphasized in medical texts and rarely discussed in religious texts. The second, which depicts the intricate circulatory system of fluids and energies throughout the body, is of importance to both medical and religious literature, particularly as medical traditions become more deeply embedded in Buddhist frameworks.

II. The medical body: its natural basis, humoral organization and digestive physiology

Although Tibetan medical theory and practice is suffused with religious concerns, the focus of medical traditions is most explicitly on defining the workings of the ordinary human body and considering how to heal states of disease. Significantly, medical systems are thus concerned with the condition of ordinary *human* bodies, and not with the metaphysical bodies of Buddhas.

II. a. Indian medical foundations for Tibetan medicine

In chapter two, I described the textual inheritance from India that provided Tibetan authors with a background of Indian medical theory. Āyurvedic writers regarded the human body as a conglomeration of bodily constituents (Skt. *dhātu*)—these constituents are particular compilations of the five natural elements, water, fire, air, earth, and space. The body functions properly when the bodily constituents are correctly proportioned. The bodily constituents are created from the food one consumes; the purified component of food yields

the constituent of nutritive "food-juice" (sometimes also translated as chyle or plasma), producing subsequently the remaining constituents of blood, flesh, fat, bones, marrow, and semen (in Sanskrit, *rasa, rakta, māmsa, medas, asthi, majjā* and *śukra,* respectively). The impure component of food forms waste products (Skt. *malas*) that are excreted from the body in the form of urine, sweat, and feces. Other bodily waste products include the threesome of *vāta, pitta* (a waste product of flesh), and *kapha* (a waste product of *rasa*), generally translated into English as wind, bile or gall, and phlegm or mucus, respectively, following the humoral terminology used in the study of ancient Greek thought. Of all waste products, these three—the *dośa*—are perceived to be primarily responsible for bodily morbidity and are regarded as the most essential factors in determination of a human's constitution. The doctrine of the three humors, or *dośa,* is the basis of Āyurvedic pathology and therapeutic technique, and it is a doctrine that is carried into Tibetan medicine with little alteration.

With a few exceptions, a human's constitution is dominated by one of the three humoral conditions from the moment of conception. While the exceptions include rare individuals in perfect health exhibiting an equipoise of humors, more common is the categorization of individuals according to a continual predominance of one or the other humor. Significantly, then, the doctrine of the three humors—whether in Āyurvedic or Tibetan medicine—is valid in understanding good health as well as pathology. In good health, the humors in one's system remain in balance with each other and with one's environment and food consumption. When some aspect of a certain humor is provoked,

however, and the equilibrium is tipped, disease results. The physician's role, therefore, is to identify which aspect has increased or decreased to the detriment of the whole system. Treatment consists of returning the humors to their normal state, taking into consideration the patient's diet, behavior, stage in life, and the season.

II. b. The Tibetan medical model of adult embodiment

Tibetan medical presentations of the body are very similar to Āyurvedic presentations such as that of *Caraka.*[131] Tibetan medical systems in the tradition of the *Four Tantras* regard the body as composed of two principal components: one, the substances of the body, or the bodily constituents (*lus zungs*, equivalent to the Āyurvedic *dhātu*), and two, the functional processes (*'du ba*, meaning literally "gathering together") that activate the body's substances. These processes are the humors (*nyes pa*, equivalent to the Āyurvedic *dośa*). Together these two—the substances and the forces that act upon them—comprise the "aggregates" (*phungs po*) of the ordinary human body. The bodily constituents and the humors are related as object and subject, Tibetan medical texts calling the constituents "the objects of disturbance" (*gnod bya'i khams*) and the humors "the agents of disturbance" (*gnod bya*).[132]

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[131] Chinese influences on Tibetan medicine appear to occur primarily in areas other than that of physiology, although it is likely that there are connections with the Chinese methods of classifying internal organs into solid and hollow organs. Moxibustion techniques are claimed to originate with Chinese medical traditions. The maturity of the Tibetan system of pulse analysis, a means of diagnosis not present in Āyurveda until the twelfth century, also suggests links with Chinese medicine. See Tom Dummer, *Tibetan Medicine and Other Holistic Health Care Systems* (New Delhi: Paljor Publications, 1998); Robert Svoboda and Arnie Lade, *Chinese Medicine and Āyurveda* (Delhi: Motilal Banarsidass, 1999).

[132] Although I have not extensively researched this issue, I have not seen this type of presentation in Āyurvedic texts. A clear explanation of this presentation can be found in Namkhai Norbu, *On Birth and Life: A Treatise on Tibetan Medicine*, trans. Enrico Dell'Angelo (Tipographia Commerciale Venezia, 1983). This presentation is also found in the fifth chapter of the *Four Tantras' Explanatory Tantra: Rgyud bzhi*, 41-45. For translation, see *The Quintessence Tantras of Tibetan Medicine*, trans. Barry Clark (Ithaca: Snow Lion Publishers, 1995), 60-65. Also see Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad* (pe cin: mi rigs dpe skrun khang, 1999), 63.

As in the Āyurvedic model, the bodily constituents in Tibetan medicine are the seven substances of the body: the nutritive essences of food and drink, blood, flesh, fat, bone, marrow, and the reproductive substances.[133] Each of these has specified functions in maintaining bodily structure and processes. After food has been digested it takes one of two forms, nutrients (*dwangs*) and wastes (*snyigs*). This separation of nutrients from wastes occurs in the lower stomach area. Waste products are then further separated into liquids and solids and excreted as urine and feces. Nutrients pass to the liver and are metabolized to form the basic substances of the body's physical constituents. In the liver, the physiological processes of decomposing phlegm (*tshim byed bad kan*), digestive heat (*me drod*), and the fire-accompanying wind (*me dang mnyam pa'i rlung*) act to transform the nutrients into blood, which is sent throughout the body and then transformed into the next bodily constituent, flesh. Flesh is transformed by additional metabolic factors into bone tissue, which in turn produces bone marrow. The nutritive aspects of marrow, when utilized by the reproductive system, produce the reproductive substances, semen and menstrual blood. The digestive system of separation and transformation is precise, each substance providing direct nourishment for specific functions or organs of the body. The end-point of the entire digestive process, which is said to take six days, is the creation of the reproductive substances, which are therefore considered to be the essential distillation of all the physical constituents.

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[133] The seven bodily constituents (*lus zungs*) in Tibetan medical physiology are the nutritive essences (*dwangs ma*), blood (*khrag*), flesh (*sha*), fat (*tshil*), bone (*rus ba*), marrow (*rkang*) and the reproductive substances (*khu ba*). The digestive physiology described in this paragraph appears to be derived from Āyurvedic models of digestive physiology; see for instance, the graphic depiction of the process in Svoboda and Lade, *Chinese Medicine and Āyurveda*, 56. Identification of subtle divergences between the two traditions would require further research beyond the scope of this project. On the variety of theories on humoral and digestive physiology among the three great Āyurvedic writers, see Dasgupta, *History of Indian Philosophy*, 325-339.

The quality of one's general health, as well as one's life span and complexion, are ultimately said to be determined by the quality of the distilled reproductive substances. It is thus the human body's very finest quintessence that is involved in the creation of a new human body at the time of conception.

Also central to Tibetan digestive physiology is the concept of bodily heat (*me drod*). Heat is causally responsible both for digestion and for the separation of substances into wastes and essential nutrients. Heat is said to be a necessary part of each of the seven constituents, three humors, and three excretory substances. Many chronic diseases are caused by an insufficiently strong power of bodily heat, and many therapeutic techniques are therefore aimed at improving heat. The modern Tibetan medical scholar Thubten Phuntsok (*thub bstan phun tshogs*, b. 1955) describes the role of bodily heat in digestion as follows.

> In general, the food and drink that are consumed, possessing the nature of the six flavors, are initially passed to the throat by the life-sustaining wind, and from there they enter into the stomach, and the pieces are destroyed by the liquids; by oiliness they are then made soft. By being blown on by the fire-accompanying wind that abides in the stomach, the potency of heat, which is fire-like in nature, blazes greater, and by that means the food and drink are digested in the region of the stomach. For example, it is like putting medicine and herbs into a vessel and boiling them into *khanta*, [a hard, dried type of medicine that can be preserved for a long time].[134]

The bodily substances and digestive processes are presented in the *Four Tantras' Explanatory Tantra*'s fourth and fifth chapters. The bony structure of the body is explained

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[134] Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad*, 66.

in the brief chapter preceding those, chapter three, which describes anatomical structure through the use of architectural similes:

> The two hip bones are like the foundation for the walls. The spine is like a pile of gold coins and the life channel is like a pillar of agate. The square sternum (breast-bone) is like the supporting beams whilst the twenty-four ribs closely resemble the cross-beams. The costal cartilages are like (projecting) brackets. The channels and ligaments are like a network of roof-laths (struts), whilst the flesh and skin are like the plaster...[135]

Inside the castle-like structure of the body, the organs are imaged as courtly inhabitants, with the heart as the king and the other important organs, his queens and attendants. This political hierarchy of the visceral systems, with the semantically charged features of the body organized in terms of a political ideal, is a fascinating feature of Tibetan anatomy likely derived from Chinese traditions.[136] In addition to emphasizing interactive and hierarchical relationships as integral to the structure of the body, here we also see the body portrayed geometrically and geographically. At a time when Tibetans were marking their landscape with structures of social and religious importance, the human body too was stamped as a semantically charged place in which social and religio-political hierarchies ruled. In chapter six I will point to this emphasis on geometrically and interactively defined space as a key feature in Tibetan historiography as well.

Described in the fifth chapter of the *Explanatory Tantra,* the three humors—wind (*rlung,* equivalent to the Āyurvedic *vāta*), bile (*mkhris pa,* equivalent to the Āyurvedic *pitta*),

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[135] Ibid., 51. *Rgyud bzhi,* 36-37.

[136] For a similar Chinese tradition see Nathan Sivin, *Medicine, Philosophy and Religion in Ancient China: Researches and reflections* (Great Britain: Variorum, 1995), 7. I have not seen this type of allegorical anatomical presentation in Āyurvedic sources.

and phlegm (*bad kan,* equivalent to the Āyurvedic *kapha*)—are united in an individual from the moment of conception. While the three humors can disturb health and even cause death, it is important to note they are not the sole causes of ill health. As in Āyurveda, they are only the causes of ill health when they are in a state of imbalance—in their "natural state" they are sources of bodily health and well-being.

The three humors are numerologically classified in various ways. Each is first divided into five types according to individual function. Thus as explained above, during the digestive process one form of the phlegm-humor is responsible for breaking down food that has been eaten, a form of the bile-humor then digests the food, and a form of the wind-humor separates the fully processed food-stuff into wastes and essential nutrients. Each of the three humors also possesses six qualifying characteristics that further describe the specific effects or qualities these humors express as bodily experiences. So, for instance, the wind-humor is characterized by six qualities: rough, light, active, subtle, cold and hard. In other words, roughness, experienced as a rough tongue or rough skin, is an expression of the presence of the wind-humor in the body. The wind-humor's quality of coldness is likewise what causes an individual to shiver or desire hot drinks. Each of the five types of the three humors is also assigned a particular set of five functions and five locations in the body. The wind-humor is responsible for sensation, including the workings of consciousness, as well as for the movement of substances and qualities around the body, and it is located in the vessels linked to the sense organs, which are located in and around the head, chest, heart, stomach and anus. The bile-humor is responsible for bodily color and heat, including the digestion of

food, is found in the stomach/intestines, liver, heart, eyes and skin. The phlegm-humor is affiliated with psycho-physical qualities such as stability, smoothness, and connectivity, is located around the chest, stomach, tongue, head and joints.

As physiological processes that functionally organize the body's activity, vitality, and stability,[137] the humors affect embodied experience from before the time of conception until one's death. Tibetan medical texts claim that an appropriately balanced humoral makeup in the reproductive substances—the male sperm and female blood—is one of the necessary conditions for successful conception and formation of the embryo. The *Four Tantras* carefully explains why humoral or other defects in these factors will result in the failure to conceive, or in the conception of a child that is in some way abnormal.[138] Although their balanced presence in the male and female reproductive fluids is said to be required for successful conception, however, they are given no role in the development and growth of the body during gestation, according to all known Tibetan embryological narratives. This is remarkable given the essential role of the humoral understanding of the body in the etiological, diagnostic, and therapeutic practice and theory of Tibetan medicine. I will return to this point later as part of an argument about the role of embryology in the medical tradition in Tibet.

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[137] Loizzo and Blackhall interpret the three humors as "three aspects of self-organization [that] may best be conceived as systemic aspects of activity, vitality, and stability." Joseph J. Loizzo and Leslie J. Blackhall, "Traditional Alternatives as Complementary Sciences: The Case of Indo-Tibetan Medicine," *The Journal of Alternative and Complementary Medicine* 4, no. 3 (1998): 313.

[138] *Rgyud bzhi*, 32-33.

III. The body's circulatory system

For the most part housed as a component of the Tibetan medical tradition, the theory of the body's digestive physiology and humoral organization just outlined plays little if any role in Tibetan religious traditions. While religious systems that teach yogic practices do draw on notions of inner heat that are related to the physiology of digestive heat described in medical texts, in general the technicalities of digestive physiology and its relation to the maintenance of the bodily constituents are not taught in religious texts. When we turn to another central aspect of bodily function, that of the circulatory system, however, we see a much closer interaction between medical and religious systems. Significantly, various aspects of the circulatory system also play a large role in both medical and religious presentations of the growth of the embryo.

The general model of the circulatory system portrayed in early Tibetan medical literature is derived from classical Indian Āyurveda. Āyurvedic medicine describes a network of hundreds of large and small ducts, or channels, variously named *nāḍī, śirā, srota* or *dhamanī* in Sanskrit, that transport nutrients, wastes, respiration and other substances throughout the body. By connecting internal organs, these channels are responsible for digestive and other physiological processes. They also facilitate the movement of joints and limbs, and they carry sensory information that allows sense organs to function. The precise enumeration of various types of channels and their functions, however, is a contested topic, and debates among Indian medical scholars concerning the circulatory system are common. The structure of the circulatory system in medical texts is significantly different than the

circulatory system described in Indian tantric texts.[139] In brief, unlike in medical texts, tantric physiology begins with a vertical spinal column in which, or along which—this too is debated—are three primary channels. At each of four points along this vertical column, at the throat, heart, navel, and genitals, is a channel nexus or "wheel" (*khor lo,* Skt. *cakra*), and all subsidiary channels of the body are connected to this vertical column. Although over the centuries some Tibetan writers have tried to unite medical and tantric accounts of anatomy and physiology, descriptions of the body in South Asian literature are so numerous and complex that few differences are fully reconciled.

III. a. The Tibetan medical model of circulatory physiology

In Tibetan medical literature of the *Four Tantras* tradition, descriptions of the human circulatory system focus on the circulatory channels (*rtsa,* equivalent to channels variously named *nāḍī, śirā, srota* or *dhamanī* in Sanskrit)—these are sometimes translated into English as "veins," "arteries," or "nerves," although the term *rtsa* in Tibetan is not directly equivalent to any of these. These channels are the basis of the circulatory system of winds, blood, and other energies and fluids that connect all aspects of the body. The contemporary scholar Thubten Phuntsok explains that in Tibetan medicine channels are classified in several ways.[140] According one taxonomy of channels, there are black channels (*nag rtsa*), also called blood channels (*khrag rtsa*), and white channels (*dkar rtsa*), also called

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[139] For an overview of the circulatory system in classical Āyurveda, followed by a discussion of the same in tantric texts, see Dasgupta, *History of Indian Philosophy,* vol. 2: 344-357. Also see Kenneth Zysk, "The Science of Respiration and the Doctrine of the Bodily Winds in Ancient India," *Journal of the American Oriental Society* 113, no. 2 (1993). A comparison of Āyurvedic and Tibetan medical theories of the circulatory system is beyond the scope of this dissertation, and the following section focuses only on Tibetan literature.

[140] Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad,* 80.

water channels (*chu rtsa*). Blood channels are further divided into "pulsating" channels (*'phar rtsa*) and "staying" channels (*sdod rtsa*), which are sometimes today translated as arteries and veins, respectively. Tibetan medical texts also classify channels functionally, in which case there are four types: channels of embryonic formation (*chags*), channels of existence (*srid*), connecting (*'brel*) channels, and vitality (*tshe*) channels.

The development of the circulatory system is an important event in most Tibetan embryological narratives. The fourth chapter of the *Explanatory Tantra* presents the fourfold functional division of channels just mentioned, beginning with three channels of embryonic formation (*chags*). Called the water or white channel, the blood or black channel, and the wind channel, these three are said to extend from the navel of the embryo. The water or white channel travels vertically along the left side of the body, and the *Four Tantras* tradition states that it forms the brain; its functions and activities are thus primarily focused in the upper part of the torso and head. The blood or black channel travels vertically along the right side of the body and is related to liver function, as well as with the emotion of anger and the bile-humor; its activities are concentrated in the central part of the torso. The third channel of formation is associated with the emotions of desire and attachment and the region of the sexual organs, as well as with the activities of the winds.[141] Although the issue is contested, some religious and medical scholars, including Lodro Gyalpo, Desi Sangye Gyatso, and the eminent twentieth-century Sakya scholar Tsultrim Gyaltsen (d. 2001), identify these three channels in the *Four Tantras* with the three channels of tantric physiology, as I will discuss

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[141] *Explanatory Tantra* discussion of the circulatory channels begins on *Rgyud bzhi*, 22.

below.

The second of the fourfold functional division of channels, the existence (*srid*) channels, are themselves of four types. They are said to be responsible for sensory engagement with the external world, what we would call emotional feelings, and nourishment of the bodily constituents. Thubten Phunstok explains that in the *Four Tantras* tradition, once the channels of formation have been completely produced in the embryo, the existence channels develop in four locations in the body and branch out into hundreds of surrounding auxiliary channels. Situated in the brain, the first existence channel is responsible for the function of the sense organs. The second existence channel, in the heart region, is the basis of memory, conceptuality, and awareness of the ego. The third channel is located at the navel and in this tradition is considered responsible for the embryonic body's growth. The fourth channel, in the area of the genitals, is referred to as the source of one's family lineage.[142] Although the *Four Tantras* does not use the term "wheels" (*'khor lo*) in this context, Tsultrim Gyaltsen claims that the four existence channels and their surrounding auxiliary channels described in the *Explanatory Tantra* are the four wheels referred to in Buddhist tantric systems.[143]

The two connecting (*'brel*) channels are referred to as white and black, or water and blood, channels. In the adult, hundreds of subsidiary channels branch off from these two

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[142] Thubten Phuntsok summarizes the *Four Tantras* presentation at Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad*, 83-85.

[143] Tshul khrim rgyal mtshan, "Sman thang las 'brel pa rtsa yi gnas lugs kyi dpe ris skor gsal bar bshad pa," in *Krung go'i mtho rim bod sman shib 'jug bgro gleng 'dzin grwa'i rtsom yig gces bsdus* (bod rang skyong ljongs sman rtsis khang nas bsgrigs, late 1990s), 84. This article has been translated in Frances Garrett and Vincanne Adams, "The Three Channels in Tibetan Medicine, with a translation of Tsultrim Gyaltsen's "A clear explanation of the principal structure and location of the circulatory channels as illustrated in the medical paintings"," *Traditional South Asian Medicine* (forthcoming).

main connecting channels, interlinking the limbs and organs throughout the entire body. As in the Āyurvedic tradition, Tibetan medical texts debate the precise pathways of these hundreds of channels. The black connecting channels are said to be filled exclusively with blood and, passing through the liver, are involved in the sustenance and development of the seven bodily constituents; a subset of these are the channels used in the medical practice of blood-letting. The main white channel, also traveling from the brain to the coccyx bone, is white in color. It and its branch channels, sometimes glossed in English as "ligaments," "tendons," or "nerves," are responsible for many of the functions also attributed to the existence channels, such as regulating emotions, enabling physical movement, and allowing speech and mental functions. The sixteenth-century medical scholar Lodro Gyalpo associates the white existence channel with the tantric solitary channel (*rkyang ma*), running vertically along the left side of the body, and the black existence channel with tantric flavor channel (*ro ma*), running along the right side of the body.[144]

Finally, the *Explanatory Tantra* states that there are three types of vitality (*tshe*) channel: one type that works throughout the entire body, a second type that accompanies respiration, and a third that also pervades the entire body acting as a sort of "life force."[145] The modern medical scholar Thubten Phunstok explains that according to the interpretation of Lodro Gyalpo's sixteenth-century *Transmission of the Elders,* the vitality channels are not "real" (*dngos*) channels; rather, they refer to forces within the body that maintain life.[146]

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144 Cited by Thubten Phuntsok on the basis of Lodro Gyalpo's *Transmission of the Elders,* 165. Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad,* 108-109.
145 *Rgyud bzhi,* 23.
146 Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad,* 101.

Human life in this tradition is by definition dependent upon the continuation of three physiological functions: the radiance (*gzi mdangs*) of the body caused by the metabolized essence of the reproductive substance; the movement of the breath; and the digestive fire of the body.[147] When these functions are discontinued, death results. The vitality channels therefore refer to the activity of these three functions in sustaining life. Pervading the entire body, the first of the three vitality channels is the body's digestive fire (*me drod*), which separates and refines the essential nutrients and wastes during the digestive process, thereby maintaining the function of all the bodily constituents that ultimately produce the body's radiance. The second vitality channel is the "innate wisdom" (*ye shes*) wind that accompanies respiration. The innate wisdom wind is distinguished from the karmic (*las*) wind; the *Transmission of the Elders* explains that the karmic winds are those breaths that move in and out of the nostrils regularly, whereas the innate wisdom wind is the special type of wind that is only controlled through advanced yogic manipulations.[148] If the totality of innate wisdom wind is incorrectly circulated through the respiratory system, a person may become severely ill or die; for this reason these yogic practices are considered dangerous and are restricted to advanced contemplatives. The third type of vitality channel is the body's "life force" (*bla*), which is physiologically defined as the distilled essence of the body's reproductive substance, the refined substance that results from the total metabolic system that creates each of the bodily constituents. This life force is said to migrate throughout the body along a predictable track over the duration of a month, although the precise course of this track differs according

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[147] Ibid., 102.
[148] Ibid., 103.

to the various tantras, medical texts, and astrological texts in which this subject is discussed in detail.

Another important channel described in the *Four Tantras* tradition is the life channel (*srog rtsa*). This channel is not named in the *Explanatory Tantra*'s fourfold functional division of channels, enumerated in that book's fourth chapter, described above, but it is mentioned in the context of embryology, in the *Explanatory Tantra*'s second chapter. That chapter states that the life channel develops from the navel during the sixth week of gestation. The identification of this life channel in relation to the other circulatory channels operative in adult physiology was, and still is, hotly contested among medical and religious scholars. Some medical scholars claimed that this life channel corresponds to the black blood channel;[149] still others claimed it was the white channel or the spine itself.[150] Summarizing Lodro Gyalpo's position on this issue, the Sakya scholar Tsultrim Gyaltsen posits that the life channel that initiates embryonic growth is to be identified as the central channel (*dbu ma*) of the tantric traditions; that is, these scholars state that the two terms are synonymous for the same circulatory function.

III. b. Tantric models of circulatory physiology

It is clear from the above discussion that although the *Four Tantras* did not organize their presentation of the circulatory system in the same manner as did the religious tantras, Tibetan medical scholars for several centuries to the present date have been concerned with

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[149] Tsultrim Gyaltsen attributes this position to the medical scholar Tashi Bum, a student of Situ Panchen, who wrote a commentary on the *Four Tantras* (I have not been able to locate this text). Tshul khrim rgyal mtshan, "Rtsa yi gnas lugs," 85.

[150] Lodro Gyalpo (132) does not identify these scholars by name.

reconciling the two systems to some extent. The definition and enumeration of the circulatory channels is certainly a matter of controversy in medical and religious texts from the origins of these literary and scholastic disciplines in Tibet. Explication of the human circulatory system is one of the most complex and heavily theorized topics in Buddhist medical *and* religious scholasticism: this aspect of human physiology was important to everyone. In the twelfth century, the Sakya master Drapa Gyaltsen wrote that it is vitally important for religious practitioners to know about the body because the body is the basis for meditation practice. He cites the *Saṃputi* tantra to say that, "[Even if you knew all] the rituals of the 84,000 divisions of the dharma, without knowing the nature of the body none of those [practices] would have any effect."[151] Attempting contemplative practices without a clear understanding of the body, Drapa Gyaltsen continues, is like trying to milk an animal by tugging at its horns.

In Indian and Tibetan Buddhist tantric contemplative systems, the basis of human physiology is the subtle architecture of channels, winds, and quintessential essences—*rtsa,* equivalent to the Sanskrit *nāḍī; rlung,* equivalent to the Sanskrit *prāṇa* or *vāyu;* and *thig le,* equivalent to the Sanskrit *bindu, tilaka,* or *śukra*—and the four, five or six channel nexuses or "wheels" (*'khor lo,* Skt. *cakra*). While tantric systems vary to some degree, in general the locations and functions of the three channels are agreed upon. In brief, the central channel (*dbu ma,* Skt. *suṣumṇā*) runs vertically through the center of the wheels from the genitals to the crown of the head. Control over the entry of the winds into the central channel and their maintenance within that channel, which is ordinarily empty, is the objective of many of the

[151] Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 60.

most advanced tantric contemplative practices. Running vertically through the center of the body to the left and right of the central channel are the solitary channel (*rkyang ma,* Skt. *piṇgalā*) and the flavor channel (*ro ma,* Skt. *iḍā*) respectively. The white-colored solitary channel, along the left, is said to face downward, and the red-colored flavor channel, on the right, is said to face upward. The upper tips of these two channels connect at the nostrils, and it is through these channels that ordinary respiration travels. The bottom ends of these two channels approach the lower tip of the central channel, but ordinarily they do not touch the central channel—it is the aim of many advanced tantric practices to cause the ends of the right and left channels to touch the central channel so that the respiration may enter the central channel during the course of contemplative practice. The lower tips of the right and left channels are also associated with expelling waste matter from the body—in men and women of good health, urine emerges from the solitary channel and, for women, menstrual blood from the flavor channel. The central channel is associated with the release of reproductive fluids.[152] While in general this presentation is agreed upon in tantric Buddhist texts, there are, of course, variations in detail—one such variation, of particular relevance to the embryological narratives studied in this dissertation, is that of the Nyingma scholar Longchenpa. I will return to his account of the channels and their role in embryology in chapter four.

Many volumes in Indian and Tibetan literature are occupied by discussion of the three channels, their functions, their relationship to other aspects of the body psychologically and physiologically, and the techniques for controlling their functions during meditative

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[152] Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad,* 107.

practice. Nonetheless, in the dialog between Tibetan medical and religious traditions over the centuries, the very existence of these three channels is questioned. The sixteenth-century medical commentator Lodro Gyalpo cites an unidentified Vajrayāna scholar to assert that the tantric presentation of three channels is a trope developed to enhance contemplative practice, and that in fact the three channels do not exist in the body. Lodro Gyalpo asks in response how a soteriologically transformative effect could possibly occur as a result of completing such tantric practices, if the three channels did not even exist.[153] Other unidentified scholars assert that if these three channels really exist, they ought to be clearly visible in a corpse. Commenting on this debate, the modern Sakya scholar Tsultrim Gyaltsen points out that many elements of the body, such as aspects of the bodily constituents or forces of illness, are invisible, and yet their effects prove their existence.[154]

Also important in tantric physiology are elaborate descriptions of the winds and the quintessential essences. The twelfth-century Sakya scholar Drapa Gyaltsen explains that when discussing winds functionally, tantric traditions generally describe five primary winds,

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[153] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung,* 132-134. Also see Tshul khrim rgyal mtshan, "Rtsa yi gnas lugs," 88.

[154] Tshul khrim rgyal mtshan, "Rtsa yi gnas lugs," 89. Vincanne Adams reports that these same debates echoed still in the seminar rooms of the International Academic Conference on Tibetan Medicine held in Lhasa in 2000. Scholars questioned their ability to "prove" the material existence of channels that have no apparent physical correlate in anatomical dissection, and physicians wondered whether Tibetan medicine should simply abandon discussion of such channels, since they have no obvious bearing on physical outcomes of medical interventions. Within the halls of Lhasa's Tibetan medical college and clinical institution, *Mentsikhang,* there is a growing tension between those scholars who remain committed to explications of Tibetan medicine that require acceptance of the three channels, and those who do not. Tsultrim Gyaltsen's position is that the medical tradition and the tantric tradition are ultimately in agreement on the existence of the three channels in the human body. Because medical texts address most centrally the healing of illness, however, the topic of the three channels are only alluded to in the medical tradition, and therefore it is within tantric texts, which teach meditation practices that are explicitly involved with the subtle body, that the three channels are explained at length. Tsultrim Gyaltsen insists, contrary to alternative opinions, that the presentation of the body found in tantric texts describes the ultimately true condition of the body, and that the Tibetan medical texts are in full agreement with that presentation. See Garrett and Adams, "Three Channels in Tibetan Medicine."

often called the five "outer" winds (*phyi'i rlung lnga*), and five subsidiary winds. The life-sustaining (*srog 'dzin*) wind is located at the heart and is generally responsible for the integrated relationship between mind and body. In many cases the life-sustaining wind is differentiated from the other nine winds as being either associated with or synonymous with the innate wisdom (*ye shes*) wind. Disturbance of this wind can thus result in insanity or death. This is an important wind in many embryological narratives, as we will see shortly. The downward-clearing (*thur sel*) wind is located near the anus and responsible for waste elimination. The fire-accompanying (*me mnyam*) wind is at the navel, aiding in the digestive process, as mentioned earlier. The upward-upholding (*gyen rgyu*) wind is at the throat, effecting speech, laughter, or vomiting. The all-pervasive (*khyab byed*) wind, finally, pervades the entire body. While the names of these winds can vary slightly by tradition, Drapa Gyaltsen also describes five subsidiary winds, located at the sense organs and the joints and responsible for interacting with external objects: the serpent (*klu*) wind, located at the eyes; the tortoise (*ru sbal*) wind at the ears; the chameleon (*rtsangs pa*) wind at the nose; the Devadatta (*lhas byin*) wind at the tongue; and the bow-victor (*gzhu las rgyal*) wind in the joints. Each of the ten winds is also associated with the elements and with colors.[155] While in some embryological narratives the winds are essential causes of fetal growth, the winds described in those accounts are not—with the exception of the life-sustaining wind—the ten winds of Buddhist tantra listed above. I will return to this issue in chapter five.

Some Buddhist systems also categorize winds according to how they circulate in the

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[155] This discussion about the winds is at Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 63a-65b. For a discussion of the winds in religious traditions, see also Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad*, 113-118.

body. Using this type of organizational scheme, Drapa Gyaltsen presents the twofold arrangement of winds discussed above in commentaries to the *Four Tantras*: the karmic (*las*) wind, which is by nature continually moving in and out of the body during ordinary respiration, and the innate wisdom (*ye shes*) wind, most of which is generally said to remain stationary in an ordinary person's body. This too is debated, however; Drapa Gyaltsen claims that in the *Kālacakra* tradition part of the innate wisdom wind does move, spreading to various parts of the body at certain times of the day, seemingly equivalent to the "life force" (*bla*) element described above.[156]

The third aspect of traditional tantric physiologies, the quintessential essences (*thig le*), are figured both physiologically, as the two forms of reproductive substance, and metaphysically, as agents closely involved in the process of spiritual enlightenment. Also correlated in some accounts with the "life force" (*bla*) type of vitality "channel," these substances are generally said to travel around the body serving various functions throughout the day at certain locations. For example, medical scholar Thubten Phuntsok explains that one often feels dull or sleepy at noon because the quintessential essences are located in the area of the heart at that time of day and therefore interfere with the clarity of one's consciousness. The route of these substances throughout the body over the waxing and waning of the moon and over the course of a year is also recorded, dictating optimally effective dates and seasons for both meditative and medicinal behaviors.[157] Buddhist contemplative literature describes processes for purifying the white-colored and red-colored

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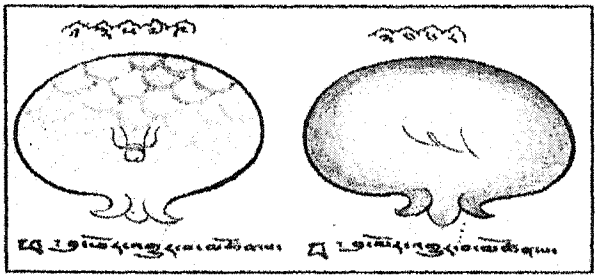
[156] Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 65a.
[157] Thub bstan phun tshogs, *Gso bya lus kyi rnam bshad*, 123-126.

quintessential essences (semantically charged aspects of the two physiological reproductive substances) and directing their activities toward certain key points of the body. Such complex, advanced contemplative practices, sometimes performed during controlled sexual intercourse, aim to purify the body and the mind and generate experiences of enlightenment.

IV. Characterizing embodiment

Tibetan religious and medical writers clearly found themselves amid numerous competing models of the psychosomatic body. In many Tibetan texts that discuss the body, adult physiology is a topic that directly follows embryology, clearly linking the two topics; in some cases, physiological analyses take place in the context of embryology itself. To return to the central question at hand for this chapter, then, what have we learned so far about how Tibetan writers identified the main character of their embryologies? First, remember that here we are not addressing the symbolic level on which the embryological narrative portrays a fictional or idealized Buddhist religious practitioner, but rather the portrayal of a more literal character, purportedly the embryo itself. Beginning with the obvious, then, the embryo is something that will grow into an ordinary adult body (the term "ordinary" implying that this adult is assumed not to possess the extraordinary body of a Buddha). The theories on adult physiology and anatomy just surveyed have suggested that for most Tibetan traditions, ordinary adult bodies have a natural basis that is sustained by a variety of systemically self-organizing processes. The substances of the body are sustained by the digestive process, which makes the internal condition of the body reliant upon substances of the world (in the

form of foods). Guided by physiological processes of activity, vitality, and stability, the body is functionally organized: the body is an integrated, coherent totality that adapts to internal and external environmental modification. It is also structurally organized by anatomical and circulatory features that are semantically charged in some way: by numerologies, sociopolitical hierarchies, or religious ontologies. In a general sense, the adult body is thus dynamically characterized by semanticized structures and a cosmologically harmonized functional adaptability. Beginning with the first of these—the characteristic of semanticized structure—the following pages will show how embryological narratives themselves are sites for working out some of the stickier issues in medical and religious physiology.



The medical painting explains that conception on odd days will bring about a boy, and conception on even days, a girl.

IV. a. Gendered, defective, and "normal" bodies

Tibetan embryological narratives contribute to the semantically charged nature of the human body in various ways. For example, most Tibetan embryologies educate their readers about gendered bodies.[158] The topic of sex or gender determination is not an insignificant

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158 Although in common parlance the two are often used interchangeably, Euro-American theorists have debated the precise distinction between the terms "sex" and "gender." "Sex" typically refers to the biological aspects of being male, female, or, in the case of South Asian literature, which generally describes three types of genital presentations, hermaphrodite. "Gender" typically refers to the behavioral, social, and/or psychological features of sexed individuals. "Sex" emphasizes the "objective" marker of a particular set of genitalia on the body, whereas "gender" is a more interpretive term that indicates a person's social status and behavior. In the case of Tibetan embryology, my point here is that the texts go beyond an objective assignation of genitalia to a social valuing of one set of genitalia over the others, and thus they are speaking about gender as well as sex.

one in Tibetan medical commentaries—in fact, if one judges by page length, no other topic during their commentaries on the *Explanatory Tantra*'s second chapter rates higher in importance to the fifteenth-century commentator Kyempa Tsewang or the sixteenth-century commentator Lodro Gyalpo. Tibetan embryologies offer several theories on how the developing embryo acquires a particular set of sexual characteristics. One verse in the *Explanatory Tantra* states that conception occurring on the odd days (the first, third, fifth, etc.) following the completion of a woman's menstrual cycle will likely result in the generation of a boy fetus, while conception occurring on the even days will result in a girl.[159] In this scheme, which is based on the Indian medical *Eight Branches* tradition, the third hermaphroditic sex (*ma ning*) is not mentioned. Only a few verses later, paradoxically, the *Explanatory Tantra* states that sex determination is made on the basis of the ratio of male and female reproductive substances present during conception:

> If semen predominates a boy will be will be born and if blood predominates a girl will be born. If the ratios are equivalent the result will be a hermaphrodite, and if [the mixture] is divided twins will be born.[160]

Despite these statements, albeit contradictory, that fetal sex may be predetermined, after the third week of gestation the *Explanatory Tantra* and its commentaries recommend a series of ritual and medicinal means, which are derived from the Indic *Eight Branches* tradition, to ensure the development of a male child. (Needless to say, no such rituals are recommended to promote the growth of female or hermaphroditic sexual characteristics). Kyempa Tsewang

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159 *Rgyud bzhi*, 33.
160 Ibid.

and Lodro Gyalpo claim that these rituals must be performed at this point because in the third week the embryo's sex is still indeterminate.[161] The *Explanatory Tantra* states that the sexual characteristics are defined in the fourth week of gestation, at which time the embryo will be rounded (*gor gor po*), oval (*mer mer po*) or elongated (*nar nar po*) according to whether it will be born as a boy, girl, or hermaphrodite respectively.[162] The assignation of sexual characteristics is clearly not a semantically neutral issue, and thus the characterization of the embryo goes beyond a description of genitalia to a sociocultural and ideological statement about gendered bodies and their relative value.

Yet another theory on the origins of sex identification, a model that exists in the early Indian Buddhist text, the *Abhidharma,* is presented by the sūtra tradition of embryology and those who follow it[163]; Lodro Gyalpo summarizes,

> Alternatively, when the intermediate state being enters the reproductive substances of the parents, it will think "that is mine"—whatever child is born as a male is repelled by the father and is attracted to the mother; whatever child is born as a female is attracted to the father and repelled by the mother. Through recognizing this, it is conceived and enters the womb.[164]

Quite unlike the *Eight Branches'* and *Four Tantras'* schemes, where newly conceived embryos are of indeterminate sex for three weeks, here it is essential to conception itself that this sex

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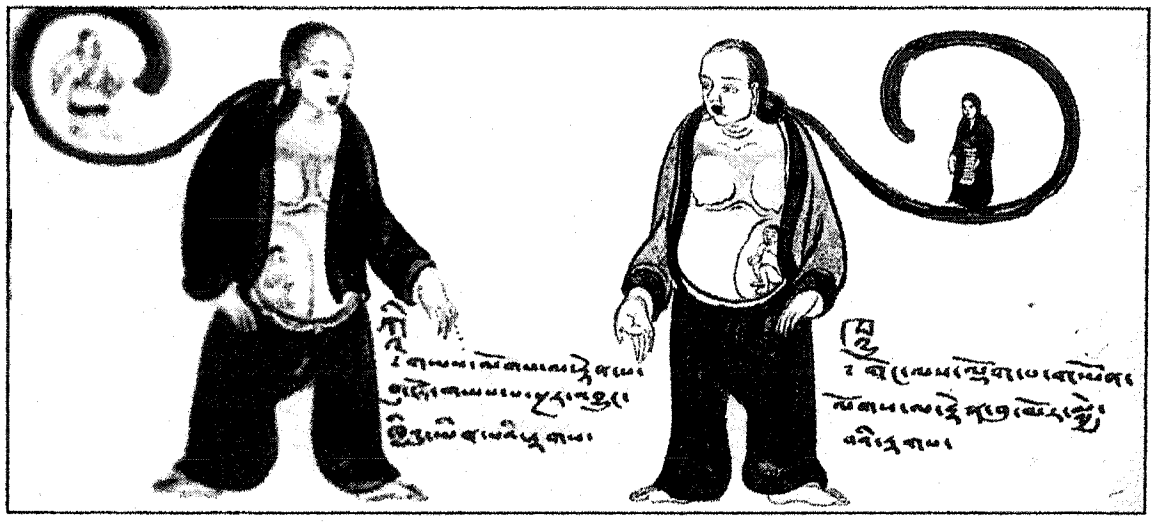
[161] Skyem pa tshe dbang, *Rgyud bzhi'i rnam bshad,* 113. Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung,* 126. By contrast, Kinney cites the Chinese *Taichan shu* to say that external rites can influence the sex of the fetus as late as the third *month* of gestation. Kinney, *Childhood and Youth in Early China,* 365.

[162] *Rgyud bzhi,* 34. Here is yet another use for the Indic terms describing the appearance of the fetus (see chapter one).

[163] *The Jewel Ornament of Liberation by Sgam.po.pa,* trans. Herbert V. Guenther, The Clear Light Series (Berkeley: Shambala Publications, 1971), 73, ff 42 and 43.

[164] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung,* 117.

identification be made—without sexual characteristics, an ordinary being cannot even be conceived. While in the *Four Tantras* tradition this *Abhidharma* model is not considered authoritative, many other Tibetan embryologies do repeat the notion that emotions of aversion and attraction toward the two parents are central to the success of conception and the formation of a sexually defined and semantically gendered human.[165]



The Four Tantras tradition also states that the child will be a boy if the woman's belly is heavy on the right side and a girl if she is heavy on the left side.

A second method of semantically charging bodies through embryology is seen in discussions of "defective" bodies. Impurities in the male or female reproductive substances are generally said by medical texts to lead to failure to conceive, as I have mentioned above. In some cases, however, conception may occur, but these impurities will cause the generation of a child with physical deformities, such as a harelip, extremely short stature, or too many or too few limbs or sense organs. Kyempa Tsewang states that such abnormalities may also be

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[165] For example see Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 59a; *Jewel Ornament*, 64. Longchenpa's *Tshig don mdzod* embryology does not mention sex identification at all. For a discussion of various classical Greek views on sex determination, see Helen King, *Hippocrates' Woman: Reading the Female Body in Ancient Greece* (London: Routledge, 1998), 8-9.

caused by a poorly proportioned accumulation of the natural elements, the bad karma of the transmigrating consciousness, the parents having had focused on such an object during intercourse, or evil spirits.[166] Such statements provide interesting evidence of Tibetan notions of physical imperfection and normalcy. Note, for example, that birth as a hermaphrodite is not considered physically defective; nor is the female form explicitly labeled a defective male, as in early Greek literature.[167] Still, however, boy children were clearly considered more desirable than girl children, and in medical texts in general, women's bodies were considered different enough from men to warrant special nosologies: certain chapters in medical texts are thus specifically devoted to "female diseases," the majority of the chapters presumably oriented primarily toward males. "Normal" bodies are without question male bodies.

IV. b. Cosmic bodies

Tibetan physiological literature defines adult bodies not only as being semantically charged structures that are gendered and normalized by embryological narratives; they are also characterized according to their basis in the natural elements and their functional adaptability. In this section I will suggest that embryological narratives tell us more about these latter characteristics through their presentation of the relationship between individual bodies and cosmic bodies. Unlike many Euro-American cosmological traditions, which often focus on the cosmos as an entity distinct from the individual, Buddhist cosmology is explicitly concerned with defining the *interactive* relationship between the human individual, his or her environment, and the cosmos. As is well known, an explicit correlation is made in

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166 Skyem pa tshe dbang, *Rgyud bzhi'i rnam bshad*, 128.
167 King, *Hippocrates' Woman*, 10.

many Asian traditions between the generation of the universe and the generation of the individual. For these systems of thought, the notion that the microcosmic individual is linked to the greater macrocosmic environment forms the basis of their understanding of the body. The Indian medical tradition's embryological presentations are explicitly correlated to cosmogony, and many Indian tantric traditions, such as that of the *Kālacakra*, similarly embrace this correlation. Tibetan astrology is thus intricately intertwined with Tibetan medical concerns as well—because the five natural elements give rise to the three humors and dictate their balance in the body, a physician's diagnosis requires understanding the movements of the planets, the changing of the seasons, and the effects of these on the condition of the human body.

The alliance between cosmogony and embryogeny can be addressed from two perspectives. First, the discursive structure of some Tibetan religious texts that narrate embryology (though seemingly not that of medical texts) explicitly links individual with cosmos. Secondly, within the narratives' stories themselves, thematic and rhetorical elements also demonstrate the commitment of many writers to communicating the inseparable nature of the individual and the cosmos through embryology.[168]

Making the direct correlation between cosmogony and embryogeny explicit, many

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[168] Here I am distinguishing between a text's discourse, which involves "the stylistic choices that determine the form or realization of a narrative text," and a text's story, which, "by contrast, focuses on the action units that "emplot" and arrange a stream of events into a trajectory of themes, motives, and plot lines." This division follows the structuralist distinction between form and meaning, or between signs, signifiers, and signifieds: thus the narrative text (the sign) has a discourse (the signifier, which is the discourse or manner of presentation) and a story (the signified, or the plot or sequence of actions). Manfred Jahn, "Narratology: A Guide to the Theory of Narrative," in *Poems, Plays, and Prose: A Guide to the Theory of Literary Genres*, ed. Manfred Jahn (English Department, University of Cologne: http://www.uni-koeln.de/~ame02/pppn.htm, 2002), Section N2.1.2 and N2.1.3.

Tibetan religious writers structured their texts as do both the classical Indian Āyurvedic texts and many religious tantras: by introducing the subject of embryology (the creation of a human) directly following a discussion of cosmogony (the creation of the universe). The *Kālacakratantra*, a text particularly influential in early Tibetan writings on embryology, itself including information on physiology, cosmology, astronomy, pharmacology, psychology and other topics, is organized by such a structure. The first two chapters of the *Kālacakra* are devoted to the cosmos and the individual, respectively, and comment directly on the relationship of the cosmos as macrocosm and the individual as microcosm. The first chapter, the "outer *Kālacakra*," which presents a complex description of the cosmos and its origins, is followed directly by the "inner *Kālacakra*" chapter, which begins as the sage Sucandra asks the Buddha, "How can the entire three worlds be within the body?"[169] The chapter explains the stages of life, beginning inside the womb, as provisional experiences of the bodies of the Buddha and asserts that both the ultimate and conventional nature of the individual, as well as its manner of creation and destruction, are identical to that of the cosmos.

Similarly organized is Longchenpa's *Treasury of Words and Meanings*, which begins with explanation of why beings stray away from the original state of enlightened existence, known as the "Ground" (*gzhi*), into the materiality that characterizes ordinary human existence. The chapter begins by describing this process of birth into ordinary human existence on a grand, cosmological scale. The process begins with the Ground's so-called "presencing" (*gzhi snang*) or manifestation, which is poetically described as an event during

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[169] Vesna Wallace, *The Inner Kālacakraatantra: a Buddhist Tantric View of the Individual* (New York: Oxford University Press, 2001), 21.

which a personified Ground fails to recognize its own nature in a manifested display of lights and self-reflective consciousness. If these manifestations are seen as Other, the Ground has strayed into a saṃsāric world of reified materiality; Longchenpa cites the *Tantra of the Adamantine Hero's Heart-Mirror* to report that at this moment, "this darkened cognition reflects, 'Have I emerged from that over there, or has that over there emerged from me?' In this way, the proto-consciousness goes astray merely by force of thought."[170] With rebirth ultimately initiated by ignorance (*ma rig pa*),[171] a being is thus embodied because of not recognizing the true nature of things. In chapter five, I will address Longchenpa's analysis of this evolutionary process in terms of the traditional Buddhist twelve-fold process of interdependent origination, which is sparked into operation by the Ground's straying. Here, however, I am calling attention to the explicit discursive linkage in Longchenpa's text between cosmogony and embryogeny.

While dramatically different in content, the discursive structure of Gampopa's *Jewel Ornament* is similar. In this text an account of human conception and embryonic development follows a graphic description of the unfortunate condition of saṃsāra into which beings are born. In Buddhist cosmology, beings are said to be reborn into one of either five or six realms. In the *Abhidharma,* five are noted: hell realms, the realm of hungry spirits, the animal realm, the human realm, and the realm of the gods. Later Buddhist

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[170] From the *rdo rje sems dpa' snying gi me long gi rgyud,* as cited in Klong chen pa, *Tshig don mdzod,* 191. Translation by David Germano. Germano, *The Treasury of Words and Meanings,* 36.

[171] Germano states that in the Great Perfection tradition ignorance is said to be initiated cosmically and evolutionarily at this moment of the Ground's straying into fictive existence, although in normative exoteric sūtric Buddhism, ignorance is said to be beginningless. David Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings* (Charlottesville: unpublished manuscript, 9/13/94 printing), 527.

schools added a sixth, that of the *asuras*, and the sixfold scheme became most popular in North and East Asian Buddhism. The hell, hungry spirit, and animal realms were considered the worst rebirths, but the inhabitants of all realms are subject to suffering, entrenched in the misery of endless desire. Gampopa's depiction of saṃsāra begins with the Buddhist cosmological classification of eighteen hot, cold, or otherwise unpleasant hell realms, their precise locations in the universe, the suffering one experiences as a resident in each of these hells, and the typical life expectancy for those residents. His explanation of birth into the human realm of saṃsāra is thus seated in the context of these frightening cosmological pictures, emphasizing the integral relationship between individual and cosmos.

The deep and pervasive interrelationship between Buddhist cosmic and individual creation is also exemplified in stories of embryogeny themselves, a link that becomes clear when we consider the importance of the natural elements, which organize and direct the universe and everything that exists within it, to human growth. This correlation is not unique to Buddhism, nor is it unique to Asia.[172] From the time of the earliest Buddhist theories about the universe, nature was understood as a causal system guided by discernable laws. Early Indian Buddhism posited foundational particulate and energetic elements in its explanation of the makeup of the universe. The *Abhidharma* explains these particulate elements (Skt. *paramānus*) as, "the smallest part of matter, uncuttable, unable to be

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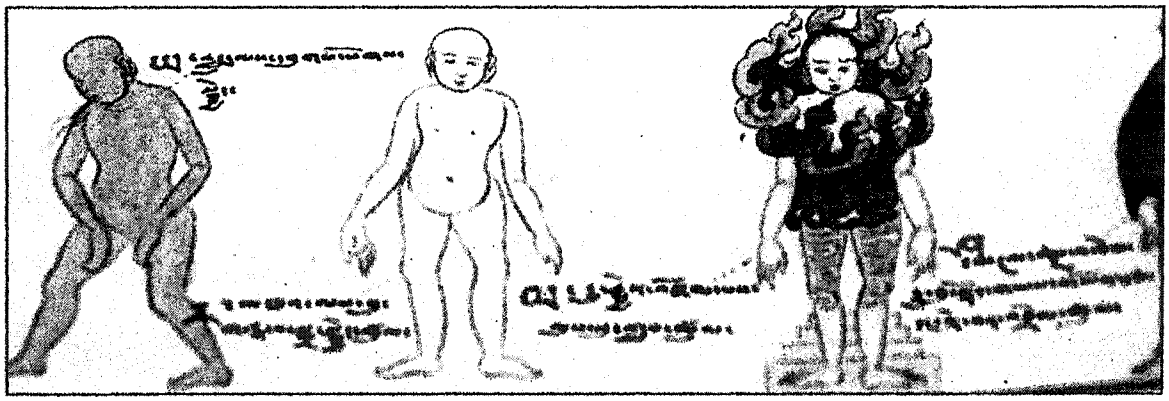
[172] For a discussion of Vedic traditions of rebirth demonstrating this correlation, see Herman W. Tull, *The Vedic Origins of Karma: Cosmos as Man in Ancient Indian Myth and Ritual*, ed. Wendy Doniger, SUNY Series in Hindu Studies (Albany: State University of New York Press, 1989). C. S. F. Burnett describes the effects of planets and the activities of the natural elements on monthly embryogenesis in texts of the European Middle Ages and Antiquity; C. S. F. Burnett, "The Planets and the Development of the Embryo," in *The Human Embryo, Aristotle and the Arabic and European Traditions*, ed. G. R. Dunstan (Exeter: University of Exeter Press, 1990).

destroyed, taken up, or grasped. They are neither long nor short, neither square not round. They cannot be analyzed, seen, heard, or touched."[173] These particles were thought not to exist independently but to occupy space only when combined together into larger conglomerations. All matter was further said to be composed of energetic forces called the "four great elements" (Skt. *catvāri mahā bhūtāni*): earth, water, fire, and wind. These qualities allowed the conglomerated matter elements, the *paramānus*, to be perceived, and the particular combination of energetic elements acting on a given *paramānus* is what gives the *paramānus* its distinguishing characteristics. Other Buddhist traditions added a fifth energetic element, space. Although later schools of Buddhist thought embraced the notion of phenomenal and personal "identitylessness," or emptiness, many still accepted the heuristic use of the early Buddhist natural physics founded on conventionally established atomic particles.



The Tibetan medical painting shows the influence of the natural elements on the growth of the fetus: the wind element (left) contributes movement, for example, and the space element (center) contributes the openings of the body and the sense of hearing. The accumulation of all the elements (right) thus creates the body.

In Tibetan accounts of conception and fetal development, as we have seen to be the

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[173] Akira Sadakata, *Buddhist Cosmology, Philosophy and Origins* (Tokyo: Kosei Publishing Company, 1997), 20, ff. 2.

case in Āyurveda, these natural elements—the building blocks of the universe itself—play an essential role. Successful conception is said to result from the mixture of male semen, female blood, and the transmigrating being's consciousness, interacting with the energetic processes of the five elements inherent in those three substances. The body is defined from the moment of conception as a particular equilibrium—characterized by the balance of elements—of bodily constituents and humors. In his *Four Tantras* commentary, Lodro Gyalpo is highly critical of those who question the need for all the elements in the growth of a new human body (despite the absence of the elements in Vāgbhaṭa's *Eight Branches* embryology, one of his primary medical sources).[174] Both the reproductive fluids of the parents and the transmigrating consciousness, Lodro Gyalpo argues, are necessarily possessed of subtle forms of the five elements, and therefore it is impossible for conception to occur without the presence of all elements. The natural elements, he explains, refer not to static material elements but rather to qualitative, dynamic functions, such that, for instance, the earth energy refers to the quality or function of hardness, or the water energy refers to the quality or function of cohesiveness, flexibility or coolness. The elements are thus the very energetic interactivity that make change and growth possible. While Lodro Gyalpo speaks adamantly on the causal necessity of the natural elements to embryonic conception and growth, the relative importance of their contribution is, in fact, debated; in chapter five I will discuss how controversial the issue of causality is in accounts of embryonic development.

Despite these debates, many Tibetan authors—religious and medical writers alike—

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[174] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 107. I will address the discrepancy between Lodro Gyalpo's views and the views of other embryologists on causality and the natural elements in chapter five.

agree that the natural elements must be mentioned in embryology as essential conditions for human conception, clearly tying the physics of the individual to that of the universe. The fact that analysis of individual human embryogeny in many religious Tibetan texts sequentially follows presentations of cosmogony also explicitly links the individual with the cosmic process, lending issues of human conception and development a tenor of profound significance. Interestingly, however, this latter structural correlation seems primarily to exist in religious texts: it is absent in the *Four Tantras* and in the two twelfth-century *Eighteen Additional Practices* texts that include early commentaries on the *Explanatory Tantra*'s embryology. The absence of a structural linkage between cosmogony and embryogeny in medical texts may therefore provide evidence for a structural—rather than thematic—distinction between religious and medical genres of literature.

V. Encountering the narrative's central subject

Embryology in Tibetan medicine is a story that identifies and defines a particular type of human being. In this chapter I have considered some of the ways that Tibetan medical and religious authors characterize the adult body, and I have asked how embryological narratives played a role in this characterization. While medical models focus heavily on the body's digestive physiology and its humoral organization, these are areas of little concern to religious authors. The geometric semantics of the body's circulatory system, on the other hand, is a topic of great concern in religious *and* medical literature, although the details are contested. I have argued that while Tibetan physiological theories are diverse and often contradictory, what they have in common is a presentation of the adult body as

characterized by semanticized structures and a cosmologically harmonized functional adaptability. These characteristics can be seen to inhabit the human body from its origins in the womb. Embryological narratives give human bodies gender, semantically charging the fetus on the basis of its sexual organs. During embryogeny human bodies are defined as defective or normal, again shaping the body in ways that are not semantically neutral. In many texts, the story of embryogeny is itself embedded in a narrative of cosmic proportions: embryogeny is not solely about the birth of a new human being, but also about the enfolding of that being into a wider, universal context that is constitutionally identical to it. In other words, embryology tells us that humans are made up of the same stuff as the universe. The embryo is literally created by food, which constitutes and sustains the very substances of the human body; by the natural elements, which make possible its structure and activity; and by its own self-organizing processes.

The identity of this narrative's character, in this case an idealized human, is thus formed by an adaptive conglomeration of interactions with its environment. To call these interactions adaptive is to say that the human individual described in embryonic and adult physiology is inherently polymorphic: according to these traditions, the formation and sustenance of the human being is polymorphically interrelated with its context. The border between individual and context is therefore not physical, as would be marked by skin, for example. Instead, as Gover describes the sociocultural view of narrative individualism, the border between the individual and its environment suggested by Tibetan embryology—and medical embryologies in particular—is deeply interactive and contextualized: in other words,

"a *semiotic boundary*, or interface...comprises the bridge between personal identity and one's social and cultural context."[175] It is thus my assertion here that embryology in the Tibetan context is employed as a semiotic system for speaking about human identity. This semiotic system, organized in the form of a narrative, is a cultural tool appropriated by Tibetans for the construction of identity, and it is used discursively to articulate and promote acceptable models of identity, continuity, and change.

In this chapter I have discussed a fictional character in the story of embryology, the embryo itself. It is interesting to note at this point that the pregnant woman has not yet made an appearance in this story—I will argue, in fact, that embryology is not centrally about the potential mother, or perhaps it is not about her at all. There is another character in the stories of Tibetan embryologies, however: the one who is represented symbolically by the embryo, the practitioner of meditation. That character will be the topic of the next chapter.

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[175] Gover, "The Narrative Emergence of Identity."

CHAPTER 4. ENACTING EMBRYOLOGY

In the real lives of Asian religious agents, ritual actions modeled after embryology are enacted in both public and private ways. Complementing the complex contemplative practices that are formed around embryological theory, there are various popularly accessible religious practices that are modeled after human conception, fetal development, and birth. From Hindu initiation rites that prescribe "incubation" in womb-like huts, to the rejuvenation therapy prescribed in the medical traditions, to preparations by alchemists, yogis, and other contemplatives, South Asian religious practice is full of methods for bodily transformation, many of which are described in terms of gestation and birth. In early Hindu ideas of rebirth through sacrificial initiation, for example, the sacrificer tosses himself, as a seed, into the sacrificial fire, the womb, in the hopes of being reborn into a new self-created reality. Internalizing the brahminic sacrifice, later yogic practices that are modeled after embryogeny are a complex extension of these rites, a literal re-enactment of the most primordial bodily transformation, that of embryogeny.

These were not isolated practices restricted to remote groups of specialists; rather, the power of embryological symbolism prevails across Asia. There are numerous "womb-caves" throughout Asia, sacred to Hindus, Buddhists, and Taoists, where the symbolism is explicit. The entrance to Southeastern Tibet's Cari, for instance, revered as the home of both Hindu and Buddhist deities, is a narrow fissure, called the goddess' vagina, and it holds a lake of red

mercuris oxide, identified as the sexual fluids of the resident divinities.[176] Francois Bizot examines Buddhist cave rituals in Cambodia, where the theme is rebirth as a new being who does not need to experience rebirth again; the body is symbolically re-formed by returning to the womb.[177] These rites are performed by lay Buddhists and have a more esoteric component for monks as well. Rituals are performed in multi-chambered caves with pools of mineral-colored water and glistening stalactites. Participants are told explicitly that they are entering a womb, and the geological features of caves are given appropriate names: stalactites are called "umbilical cords" and practitioners are instructed to cleanse their faces in pools of colored water referred to as "amniotic wells." During their stay in the cave, contemplatives practice specific breathing exercises. Cambodian rites such as these are modeled after creation texts describing the development of the primal "Dhamma Being," fashioned embryogenically from the five elements; it is this primal experience that meditators attempt to create for themselves upon entering the womb-cave. Helen Hardacre reports out that the Japanese Buddhist Shugendo cult of sacred mountains also has similar rituals.[178]

In this dissertation I will not examine the numerous contemporary and historical popular rituals using embryological symbolism as the basis for ritual action, as in the case of such practices described above, where individuals enter physical spaces representing wombs. Because I am concentrating on literary expressions and uses of embryology, and not on the

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[176] White, *Alchemical Body*, 196. See also R. A. Stein, "Grottes-Matrices et Lieux Saints de la Deesse en Asie Orientale," *Bulletin de l'Ecole Francaise d'Extreme-Orient* (1988): 37-43.

[177] Francois Bizot, "La grotte de la naissance: Recherches sur le Bouddhisme Khmer II," *Bulletin de l'Ecole Francaise d'Extreme-Orient* LXVII (1980).

[178] Helen Hardacre, "The Cave and the Womb World," *Japanese Journal of Religious Studies* 10, no. 2-3 (1983). Also see Paul L. Swanson, "Shugendo and the Yoshino-Kumano Pilgrimage: An Example of Mountain Pilgrimage," *Monumenta Nipponica* 36, no. 1 (1981).

real-life activities of religious agents or medical practitioners today or in the past, I will forego the fascinating question of how people really acted, using their knowledge of embryogeny. Rather, in this chapter I will ask, who is signified by the character of the embryo, if not the physical embryo itself? What are the stories told in such embryologies, and who are such stories about? The embryo characterized in Tibetan embryological narratives does not necessarily refer to a literal (even if fictional) embryo. In some esoteric texts it is clear that the embryo symbolically indicates a religious contemplative who wishes to be "spiritually reborn" and will therefore enact the process of embryogeny through meditation (or so the story goes). In this chapter I will consider how this symbolic character is portrayed.

This chapter will also question what story is being told about such a character. Although the processes of embryology and birth form a conceptual basis for a variety of rituals in both Hindu and Buddhist regions across Asia, I will focus primarily on embryological rhetoric in Tibetan Buddhist presentations of religious contemplative practices and models of the religious path to liberation. Embryological stories depict fictional Buddhist students and practitioners of morality and meditation who, beginning with spiritual qualities that are embryonic in achievement, undergo the soteriologically charged, metaphysical activity of gestation and rebirth. The stories about these characters are conflicting, however: in one model, the suffering of gestation and the agony of birth are used to encourage religious practice; in another model, gestation and rebirth are viewed positively as opportunities to reach new spiritual attainments.

This chapter will thus focus on some of the ways that Tibetans used embryological concepts to express normative religious views on how to follow a religious path. The Buddhist concept of "the path" (*lam*, Skt. *mārga*) is roughly comparable to the Western notion of "soteriology," the theory of salvation.[179] "The path" in Buddhist literature is a description of a process during which the religious practitioner *embodies* Buddhist truth; it is the "plot" of one's spiritual progress, weaving together a complex set of events into a single story. The path integrates a complex of ethical and ritual experiences and theoretical doctrines into a description of recommended religious practices leading to a goal. The Buddhist practitioner thus alters his or her worldview, character, and behavior in the effort to make forward progress along the path. Significantly, Buswell and Gimello note that the paths of practice prescribed in Buddhist accounts may never have been performed, or even meant to be performed; "some seem designed actually to be followed by real practitioners," they write, "others appear to be merely inspirational in intention, mārgas of myth in which the path is presented as one or another kind of heroic quest."[180]

Tibetan Buddhist writings on the structure of the path occur in a type of literature—"grounds and paths" literature, which is associated with the "stages of the path" literature mentioned briefly in chapter two—that is devoted explicitly to describing paths that are graded by spiritual levels of accomplishment, or "grounds" (*sa*, Skt. *bhūmi*). Beginning in

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[179] Buswell and Gimello note that asserting a direct equivalence between the concepts is problematic. See the discussion of the use of the term "soteriology" in the study of the Buddhist concept of "the path" in the introduction to Robert E. Jr. Buswell and Robert M. Gimello, eds., *Paths to Liberation: The Marga and its Transformations in Buddhist Thought*, Kuroda Institute Studies in East Asian Buddhism (Honolulu: University of Hawaii Press, 1992).

[180] Ibid., 7. Not all religious path texts are about practices: in some cases, path structure formulations serve rather to classify diverse doctrinal positions. Such texts on the path commonly present a hierarchical, and often polemical, systematization of Buddhist doctrines.

Tibet with Gampopa's twelfth-century *Jewel Ornament of Liberation,* this genre of literature provides instructions on religious practices, information on the obstructions that impede one's progress toward liberation, and description of landmarks to be encountered along the way to liberation. Such texts also explain the nature of the enlightenment experiences to be attained, the necessary characteristics required of a practitioner, and the variances found between the different paths that may be taken by practitioners of different skills. In this chapter I will suggest that one of the reasons Tibetan religious writers found embryological narratives particularly compelling has to do with their easy affiliation with the structure and purpose of this increasingly popular form of literature on the Buddhist path.

In examining the relationship between Tibetan embryologies and models of the religious path, I will also be considering the *discourse* of the many stories of embryogeny. A narrative's story, or that which is narrated, is not the same as *how* the story is narrated, or its "discourse."[181] Stories are typically told in such a way as to express a moral, teach a lesson, or present an interesting experience.[182] We will find narratives of embryogeny that use various discursive tools to promote specific religious practices: some embryologies are poetic, some are highly structured, and many offer particular representations of space that are integrally related to the story's underlying message. As it turns out, *how* stories of gestation are told is controversial, and we will see that although the discourse of gestation affords an opportunity

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[181] For some theorists of narratology, when discussing "story," two terms should be used. "Fabula" refers to the raw material that will be made into a story; that is, to the events that are experienced by the fictional characters. "Story" refers to the chronological sequencing of events into something tellable, and the associated characterization of actors in the story, of locations described in the story, and of relationships between characters and events. "Fabula" and "story" are also sometimes used interchangeably, however, and in this chapter I will simply use the term "story."

[182] Jahn, "Narratology," Section N4.3.

for creativity for many Tibetan writers, structural commonalities between embryological narratives suggest an interesting point of interaction between religious and medical literary and conceptual traditions in Tibet.

I. The emplotment of gestation and the Buddhist path

Associated with each story is a plot. The plot of a story is its logical and causal structure; according to Ricoeur, it is "the intelligible whole that governs a succession of events" in the story.[183] Emplotment is the process that transforms events, which simply happen, into a unified, singular story.[184] We might assume that the plot of embryology is straightforward: a man and woman copulate, and the embryo that is conceived grows until it is sufficiently developed to leave the womb. Indeed, that is essentially what Tibetan embryologies describe, and yet a closer examination of the details of gestation indicates that the composition of embryological narratives in early Tibetan literature was far from straightforward. Tibetan writers made numerous choices about how to portray the growth of the embryo. Despite the medieval Tibetan author's impulse to form intellectual alliances with India through their writings, it seems that certain issues within embryology were left to the discretion of the individual author, regardless of the availability of Indian source materials. In this chapter I will suggest that we may reconcile this disconcerting discrepancy by a closer consideration of the true plot behind the story of embryology. What is it that embryology is really about?

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[183] Paul Ricoeur, "Narrative Time," in *On Narrative*, ed. W. J. T. Mitchell (Chicago and London: University of Chicago Press, 1980), 167.

[184] D. Ezzy, "Theorizing Narrative Identity: Symbolic Interactionism and Hermeneutics," *Sociological Quarterly* 39, no. 2 (1998).

I. a. Debating the sequence of fetal development

In chapter one, I noted that the sequence in which the fetus' body parts developed in the womb was a highly contentious issue in Indian literature. This is also true in Tibetan literature. For Tibetan medical texts in the *Four Tantras'* commentarial tradition, the navel is the first part of the embryo's body to form, and thus the navel is referred to as the "cause" (*rgyu*) of the body's development. The *Explanatory Tantra* states that during the first month after conception, the embryo is transformed from a substance that resembles curdled milk in week one, to a lengthened and thickened substance (*nur nur po*) in week two, and by week three it resembles the semi-solid consistency of yogurt. After week three, the *Four Tantras* and its commentaries recommend, on the basis of the Indic medical text, the *Eight Branches*, that rituals be performed to transform the still undetermined sex of the embryo into that of a male. After a lengthy description of these rituals, the text continues, stating that in the fourth week the embryo will take on a rounded (*gor gor po*), oval (*mer mer po*), or elongated (*nar nar po*) shape according to whether it will become a boy, girl, or hermaphrodite (*ma ning*) respectively.[185]

In the fifth week of gestation the navel forms, and a week later the life channel (*srog rtsa*) extends from the navel. A preliminary form of the eyes develops in the seventh week around which the head grows the following week. In the ninth week the upper and lower torso form, followed by the shoulders and hips in the tenth week, the nine orifices of the

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[185] These terms describing the shape of the newly conceived embryo, mentioned in the last chapter, are Tibetan translations of the Indic terms found in the Pāli Canon, the *Mahābhārata*, and other early Indian sources. For a summary of inconsistencies in usage of these terms in early Indian sources, see Carl Suneson, "Remarks on Some Interrelated Terms in the Ancient Indian Embryology," *WZKS* 35 (1991).

body in the eleventh week, the five vital organs in the twelfth week, and the six vessel organs in the thirteenth week.[186] In subsequent verses the *Four Tantras* specifies which aspect of the body is formed each week, up to the thirty-seventh. The sequence of fetal development specified in the *Four Tantras* is accepted by subsequent Tibetan commentaries on that text. As we will see below, however, despite this text's prominence in Tibetan medical history, it was not considered authoritative by a host of other Tibetan writers on matters of embryology and physiology.

Four Tantras' commentators Kyempa Tsewang, in the fifteenth century, and Lodro Gyalpo, in the sixteenth century, both explicitly reject alternate theories that suggest that the head, legs, heart, or other organs are the first to develop in the embryo. Their pointed objections confirm the existence, and possibly the popularity, of such alternate views in Tibet during the preceding centuries. The rationale for their assertion of the originary function of the navel is a physiological description of the importance of the navel to the embryo's connection with the mother's body. As the bodily constituents (*lus zungs*) are metabolized in the digestive processes taking place within the woman's internal organs, the clarified essence (*dwangs ma*)[187] is collected in the reproductive vesicles (*bsam se'u*), which are the reservoir of that clarified nutritive essence. The reproductive vesicles are connected by two channels to the left and right side of the uterus (*bu snod*). Those channels are also connected to the navel

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[186] The five vital organs (*don*) are the heart (*snying*), liver (*mchin pa*), kidney (*mkhal ma*), spleen (*mcher pa*), and lungs (*glo ba*). The five hollow organs (*snod*) are the stomach (pho ba), small intestine (*rgyu ma*), large intestine (*long ga*), urinary bladder (*lgang pa*), gall bladder (*mkhris thum*), and reproductive organs (*bsam se'u*).

[187] The term *dwangs ma* sometimes refers to the nutritive essences, the first of the bodily constituents (*lus zungs*) to develop from the woman's food and drink intake in the stomach. The term *dwangs ma* can also refer to the *result* of the metabolic process, namely the seventh constituent, also called *khu ba*, which is the case here.

of the embryo residing inside the uterus. Through these channels, the nutrients produced from the woman's food intake and stored in the reproductive vesicles are passed to the developing embryo. In this way, it is said, the embryo is nourished as a field is supplied water through irrigation canals that lead from a reservoir. Lodro Gyalpo repeats statements of the Indian medical text, the *Eight Branches*, that it is the power of karma that generates the two channels that connect the reproductive vesicles to the navel of the embryo. In the *Eight Branches*, however, it is the woman's "heart" (*snying*) that is connected to the navel, not a reproductive organ. Lodro Gyalpo claims that the "heart" in that text actually refers to the reproductive vesicles, because the reproductive vesicles are the organs that integrate the "great nutrient" (*bcud*), which is the quintessential nutritive essence ultimately distilled from the woman's food and drink. Thus the reproductive vesicles are symbolically the "heart" of the developing embryo's nutritional supply.[188]

Although many, if not most, Tibetan-authored texts that describe embryogeny in any detail agree that the navel is the first aspect of the coarse physical body to develop, curiously this sequence is not, in fact, present in three of the primary Indian sources for embryology available to Tibetans, the *Entry into the Womb* and the *Abiding in the Womb* sūtras and Vāgbhaṭa's *Eight Branches*. In those texts the navel's development is not mentioned until the *third month* of gestation. In the sūtras, the structural form of the embryo is created during the fifth through eleventh weeks of development. During those seven weeks the arms and

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[188] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 124. *Snying* is frequently better translated simply as "essence," as it is commonly used to refer to the essence of something, rather than to an internal organ; but the fact that Lodro Gyalpo feels compelled to explain the term here suggests that its primary meaning in this case could be reasonably understood as the "heart."

legs, the fingers and toes, the eyes, ears, nose, mouth, excretory orifices, and the empty spaces of the body are formed. Only *after* that do the nutrient-providing navel, the internal organs, and the circulatory channels form and begin to function. In Vāgbhaṭa likewise not until the third month, after the head, legs, and arms are formed, does the navel connect to the mother and begin to nourish the fetus. Strangely, neither Lodro Gyalpo nor Kyempa Tsewang acknowledge the inconsistencies in sequence of development between that of the *Four Tantras* and the model of the Indian sources that they laud so prominently in other contexts.

According to the Tibetan medical thangka, in the twenty-second week, the nine orifices open; in the twenty-third week, hair and nails develop; and in the twenty-fourth week, the solid and hollow organs mature.

Although in the Nyingma scholar Longchenpa's fourteenth-century embryological narrative the navel does develop prior to the rest of the coarse physical body, in other respects his account of development differs vastly from that of the *Four Tantras* and its commentators. Writing at a time when the *Four Tantras* had accumulated some commentarial literature, but before the two major commentators discussed above, Longchenpa cites the *Tantra of the Sun and the Moon's Union* to say that "The bodily

elements develop from the embryo's navel, and for nine months continue like this."[189] Longchenpa does not justify the navel's primacy with an explanation of female reproductive anatomy, however, and while the navel's development occurs in the fifth week and precedes that of the torso and limbs, as in the *Four Tantras* tradition, Longchenpa's account of early embryogenesis is quite an unusual analysis of the growth of the subtle body. In his account, circulatory channels develop already in the first week of gestation; subtle letters appear within those channels and the two tiny "eye-like" drops"—called the "eye of the lamps" (*sgron ma'i spyan*) and the "eye of the elements" (*'byung ba'i spyan*)—are formed. Although in the first several weeks the embryo is repeatedly destroyed and regenerated (activity that does not occur in any of the embryological narratives mentioned thus far), these channels, letters, and other subtle body features continue to expand. During the second week, four new geographically-labeled channels stretch out from the center of the embryo: an eastern channel, southern channel, western channel and southern channel. The four element channels and the two tiny eyes grow more clearly developed.

In the third week, according to this tradition, the embryo is again sequentially destroyed and reconstituted. During this week, the force of karmic wind causes a very subtle "quintessence of heat" (*drod kyi dangs ma*) to originate inside the western channel. This causes the essence (*dwangs ma*) of the embryo's consciousness to become very clear; in the next several days of churning, the bases (*rten*) of the consciousness are gathered together. By the end of the week the embryo attains the "elongated" (*ltar ltar po*) stage, and the embryo is

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[189] Klong chen pa, *Tshig don mdzod*, 199. Germano's translation, Germano, *The Treasury of Words and Meanings*, 46. I am indebted to Germano's skillful translation and encyclopedic notes for my understanding of this esoteric text.

roughly the size of a thumb. In the fourth week the embryo is again destroyed and reconstituted and a series of subtle drops are formed, one each day. A quintessential essence (*thig le*) first originates in the eastern channel, and inside that substance, a non-conceptual consciousness (*rtog med kyi shes pa*) develops. Next, a white-colored quintessence (*dwangs ma*) of flesh forms within the southern channel, and within that there is a very subtle substance that is the basis of the psyche (*yid*) and mind (*sems*). Then, inside the northern channel the blue and red colored quintessence of breath (*dbugs*) originates, and based on this are the potential aspects (*rtsal*) of primordial gnosis and awareness, along with the embryo's own consciousness. After this, a series of "bases" (*rten*) develop inside the western, eastern, southern, and northern channels: the base of cognition, intellect and memory; the base of ignorance or "dimmed awareness" (*ma rig pa*) and emotional afflictions; the base of movements and psyche (*yid*); and the base of mind and conceptuality, respectively. Germano explains,

> These vibrant quintessences within the channels thus signify subtle concentrations of energy, which form organizing nuclei that act as the "basis" for our evolving physical processes of blood, flesh, bodily heat, and breath, as well as our ordinary processes of cognition, awareness, and perception.[190]

In the second month, as the embryo continues to be dissolved and reconstituted by the natural elements, the eyes, four "wheels" (*'khor lo*), and three vertical channels of the embryo are generated. With the development of the four wheels, the channels that are the basis for the five sense organs grow. The "element eye" and the "lamps eye" appear first in

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[190] Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings*, 621.

the navel wheel and then in each of the other three wheels, at the heart, throat, and top of the head. Extending from each wheel are a large number of additional channels. With the development of the wheels, the three main vertical channel columns running up and down the center of the body are formed. After this "firming-up" (*mkhrang 'gyur*) phase, the embryo is again destroyed and reconstituted by each of the four elements in the next week. After this point the embryo has arrived at the "fish stage" of gestation, referring to the Indic scheme of Vishnu's ten incarnations that is used by many tantric embryologies, as we will see below. In the seventh week, the elements cause the sense faculties and essential and hollow organs to form, and the embryo is in "tortoise-like" stage of gestation. From this point onwards the embryo is no longer completely destroyed and reconstituted regularly, and the actions of the elements, while still essential, are more subtle. In the eighth week, the limbs of the body are formed, and the winds enter the central channel, which matures the five elements' abilities further. During this week also Longchenpa states that the three humors are formed and the afflicted emotions are activated. The body's flesh and blood are formed, and the embryo is in the stage of the "frog incarnation of Vishnu."

Longchenpa's narrative of development ends here, at the end of the eighth week, a total of fifty-six days. During this initial period the body is fundamentally formed, and for the remainder of gestation the elements continue to mature the embryo, and the nutrients from the mother's nutrients causes the growth of skin, hair, and so on. Longchenpa therefore focuses almost exclusively on the early development of the subtle body, and all but ignores the details of development of the coarse body. The developmental sequence in this account is

completely unlike that seen in the *Four Tantras*, the Buddhist sūtra, or the Indian medical traditions.

Still another model of fetal development, in a text earlier than any mentioned above, including possibly even the *Four Tantras*, is found in Drapa Gyaltsen's *Great Jeweled Wishing Tree*, a text that describes the growth of both the subtle and the coarse body. Drapa Gyaltsen explains that when the embryo reaches the oval-shaped (*mer mer po*) stage, the central channel (*dbu ma*) begins to develop. By the power of the wind entering the central channel, the solitary (*kyang ma*) channel is formed, and when the wind emerges from the central channel, the flavor (*ro ma*) channel is formed. All other channels are produced after this. Structuring his account like some Indian tantras, Drapa Gyaltsen arranges fetal development not by counting weeks from conception but rather by organizing gestation into ten month-long stages named for the ten incarnations of Vishṇu. Drapa Gyaltsen comments that such a scheme, as taught in the *Guhyasamāja*[191] and the *Kālacakra*, was originally incorporated into those tantras "to attract followers of Vishṇu."[192] In this scheme, during the first month of gestation the embryo resembles a fish, and in the second month, the five limbs protrude slightly and the fetus resembles a tortoise. In the fourth and fifth months, the limbs are defined more clearly, and the fetus resembles two Ramas, and in the sixth month the limbs are almost completely finished and the fetus looks like Krishna. The fetus' body is completed in the seventh month, and it resembles the man-lion. In the eighth month it resembles a

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191 The *rdo rje phreng ba*, the *Vajra Garland*, the *bshad rgyud* of *Guhyasamāja tantra*.

192 Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 59b. Lodro Gyalpo also describes this scheme, linking the ten incarnations of Vishṇu with the ten months in the womb, as originating with the *Kālacakra*. Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 129.

dwarf, and in the ninth a swan. At that time it desires release from the womb. In the tenth month, Drapa Gyaltsen writes, the fetus "is a Buddha because it has completely perfected the tenth ground."[193]

Drapa Gyaltsen maintains that the coarse body, consisting of the aggregates, elements (*khams*), and sense-spheres, is established from the subtle body, consisting of the winds and mind. The topic of "anatomy" (*lus gnas*) in this text thus follows directly after an embryology that is primarily focused on the growth of the subtle body. "Anatomy" for Drapa Gyaltsen is concerned with two main topics: one, the three "maṇḍalas" of body, *bhaga*, and *bodhicitta*; and two, the winds that actualize those maṇḍalas. The "body maṇḍala" refers to the coarse body and the subtle body—the coarse body including the torso, limbs, and senses, and the subtle body including the circulatory system of channels and winds. The "*bhaga* maṇḍala" has coarse and subtle aspects too—the coarse refers to the sexual organs of the male and female, and the subtle refers to the letter channels. The "*bodhicitta* maṇḍala" refers to the semen, blood, and five nectars.[194] He explains that the winds are what "activate" the maṇḍalas of the body and support the consciousness.[195] Drapa Gyaltsen insists in this text, however, that understanding the channels is the basis for understanding all other aspects of the body. The topic of embryology, therefore, in which the origins of the channel system are taught, is clearly of great importance.

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[193] Because it is said that Buddhas complete ten grounds (*bhūmi*), therefore they are said to stay inside the womb for ten months. Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 59b-60a.

[194] The scholar Ngawang Jinpa speculates that this is probably, although it is not specified in the text, the *samaya* substances (*amritas*) of Anuttara Yoga tantra: urine, excrement, blood, semen, and brains. (Personal communication, 2000).

[195] Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 62b.

I. b. Debating the awareness of the fetus during gestation and birth

We have seen so far that Tibetan embryologies disagree with their Indian source texts on the originary importance of the navel, and that the sequence of fetal development is described variously, partly depending on whether or not writers address the growth of subtle body elements (although even this does not account for all variances). A second category of inconsistency may be seen in disagreements over whether and to what extent the fetus itself is said to be aware of the events of conception and gestation. Buddhist writers had various views on what the transmigrating consciousness experiences at the moment of conception. Some texts, such as the *Four Tantras*, the Mahāyāna *Commentary of Avalokiteśvara* and Rangchung Dorje's *Profound Inner Meaning*,[196] recount a tradition in which the ordinary transmigrating being is rendered senseless at the moment of conception, entering the womb without any awareness of the experience. Another tradition, represented by the *Entry into the Womb* sūtra, maintains that the transmigrating being will be assaulted by two types of deluded mind—attachment to one parent and aversion to the other—which will in that moment determine the gender of the fetus.[197] A third tradition, to be addressed further in chapter five, suggests that transmigrating beings with a large accumulation of merit will enter the womb with a more pleasurable experience than those with a smaller store of merit; the latter will experience fearful visions upon entering the womb, and the former will experience pleasurable visions. Similar to this is a four-fold sūtric tradition in which the experience of conception and gestation is morally coded: ordinary people enter the womb completely

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[196] The last two are cited in Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 116-117.
[197] This is recounted in Ibid., 117-118.

unaware of the moment of conception and oblivious to the entire process of gestation; monarchs and stream-enterers are aware of the moment of entering the womb, but then are "unconscious" during gestation; first-level bodhisattvas and *pratyekabuddhas* are aware of the processes of conception and birth, but not that of gestation; and bodhisattvas never lose awareness.[198]

The medical painting explains that during the thirty-sixth week (left), the fetus feels unhappy, during the thirty-seventh week (center), it feels like turning around, and during the thirty-eighth week (right), it reverses position.

Beyond the moment of conception, therefore, there are variances in how self-aware the fetus is said to be during gestation. In Vāgbhaṭa's *Eight Branches*, the fetus experiences pleasure and pain as soon as the head is formed in the third month, and the fetus' mind (*sems*) "becomes clear" in the fifth month. In the *Entry into the Womb* sūtra, in the twenty-eighth week the "eight distorted conceptions" (*phyin ci log gi 'du shes*) occur to the fetus,[199] and in the thirty-sixth week, the fetus feels unhappy about being in the womb and wishes to escape. In Gampopa's twelfth-century *Jewel Ornament of Liberation*, the embryo experiences

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198 This tradition is described in Ibid., 119-120.

199 The conception of a carriage (*bzhon pa'i 'du shes*), the conception of a storied house (*khang bu brtsegs pa'i 'du shes*), the conception of a throne (*khri stan kyi 'du shes*), the conception of a spring (*chu mig gi 'du shes*), the conception of pool (*rdzing gi 'du shes*), the conception of a lake (*chu bo'i 'du shes*), the conception of enjoyment (*kun dga' ra ba'i 'du shes*), the conception of a pleasure grove (*skyed mos tshal gyi 'du shes*)Larson, "The Concept of Body in Āyurveda and the Hindu Philosophical Systems.". *'Dga' bo la mngal du 'jug pa*, 487. Larson, "The Concept of Body in Āyurveda and the Hindu Philosophical Systems." Larson, "The Concept of Body in Āyurveda and the Hindu Philosophical Systems."

pain continually throughout gestation: in the first week it suffers unbearably as it if it is being boiled and fried, and when the nine orifices are opened in the eleventh week it feels as if it is being stabbed with a finger. By the thirty seventh week, overwhelmed by the stench, dirtiness, and darkness of the womb, the fetus craves escape. In Kyempa Tsewang's fifteenth-century *Four Tantras* commentary, the fetus recognizes happiness and suffering in the twenty-fourth week and, as in Gampopa, the thirty-sixth week brings an experience of suffering great enough to desire escape from the womb. Kyempa Tsewang summarizes yet another model of gestation, however, from the twelfth-century *Profound Inner Meaning,* in which the fetus experiences suffering beginning only in the ninth month because at that time its tongue is formed and it is able to taste its environment.[200]

I. c. Inconsistency, ignorance, or innovation?

There seems to be little transmission of consistent knowledge concerning specifically what parts of the body develop during what stage of gestation. In this regard, each embryology is unique. For some reason, this was not a topic guided by scriptural authority, nor was it a topic that warranted argument; it appears rather that here Tibetan authors allowed themselves to exercise their own discretion. Although the sequence of psycho-physical development was carefully detailed in the *Entry into the Womb* sūtra, a text considered authoritative on other matters of embryology, no subsequent Tibetan text

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[200] Skyem pa tshe dbang, *Mkhas dbang skyem pa tshe dbang mchog gis mdzad pa'i rgyud bzhi'i 'grel pa bshugs so,* vol. 2 (New Delhi: bod gshung sman rtsis khang, no date), 125.

adopted these details.[201] Likewise, no subsequent Tibetan text repeats the sequence described in the *Eight Branches*, the early Indian medical text that served as the basis of much of Tibetan medicine. While those texts that are explicitly commentaries on the *Four Tantras* did agree with the sequence of development noted in the *Four Tantras*, other contemporaneous and subsequent embryologies presented a completely different model. Gampopa's presentation of fetal development, for example, focuses primarily on growth as an experience of recurring pain and suffering. Longchenpa's very detailed description, by contrast, stressed the volatile actions of the four elements and the emotions. Strangely, given the importance of the humoral system in medical etiology and pathology, embryological narratives themselves are generally silent on the role of the humors. Very few Tibetan embryologies—in religious *or* medical texts—even mention the development of the three humors in the body, despite this being one of the most important aspects of Tibetan medical physiology.

Although it had been canonized in scriptures, in the matter of precisely how the fetus grew, external legitimation was not required; if an author's presentation diverged from known authorities, no justification was required. Drapa Gyaltsen in the twelfth century summarized the varying accounts of embryogenesis known to him, but without denouncing those diverse views—rather, he said, in effect, that such details are only part of what is to be understood from embryology.[202] The medical commentator Lodro Gyalpo asserts that

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[201] For example, the sūtras even include a very detailed enumeration of the movements of the winds in the fifteenth week that I have not seen repeated in Tibetan texts, although one might think this would have been of interest. *'Dga' bo la mngal na gnas pa*, 432; *'Dga' bo la mngal du 'jug pa*, 482.

[202] Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 59b.

agreeing with the sūtra's account of the function of the winds in gestation, as he does, does not require approving of everything else set forth in the sūtras.[203] Pointing out that such variances occurred even in early Indian texts, the eighteenth-century religious scholar Yangchen Gaway Lodro (*dbyang can dga' ba'i blo gros*, 1740-1827) likewise explains away embryological variances by saying that, in effect, it all means the same thing:

> Vasubandhu's *Commentary on the 'Treasury of Knowledge'* and the *Sūtra of Teaching to Nanda on Entry to the Womb* [switch the order of the names] for the first of the five stages, leaving the latter three as before; whereas Asanga's *Actuality of the Levels* reverses the first two [as was done in this explanation]. However, it is said that, except for there being different orders in the designation of the names, there is no contradiction in the meaning.[204]

If the details of sequence of fetal development are not what embryology is "really" about, however, why then did Tibetans consistently make note of these events? The fact is, such details—however idiosyncratically represented—were regularly included in any significant embryological narrative. Observing this lack of attention to tradition, we may wonder whether the choices Tibetans made when writing about the body's development were somehow simply random, without any type of justification. Even in such matters, however, issues that are apparently resolved through independent authorial discretion, I would argue that Tibetan writers were making deliberate choices—choices about whether the head develops first, the feet, or the eyes—according to some principle. What, therefore, might the operative principles have been in these authorial decisions? If not empirical or

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[203] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 138.

[204] Hopkins and Rinpoche, *Death, Intermediate State and Rebirth*, 62. Hopkins' translation.

scriptural, perhaps they were aesthetic principles. The authorial need to fill out certain details in the literary presentation of an issue can certainly be a question of literary aesthetics. Or, prioritizing parts of the body at the embryonic level may have harmonized with a given writer's philosophical or contemplative system—a matter of philosophical or logical aesthetics. Some embryological statements may therefore be assertions of aesthetically justified fact, carrying no stated warrant for believing them, nor any sense that such a warrant is needed.

While the details are quarreled over—Which limbs develop first? What degree of awareness does the fetus experience?—there is one important commonality in most of these accounts of growth. One of the very few consistencies across Tibetan texts with respect to the sequence of fetal development occurs in their classification of development into stages. As I mentioned in chapter two, most Tibetan texts describe the appearance of the early embryo using a vocabulary—*nar nar po, mer mer po, gor gor po* and sometimes *ltar ltar po*, which are variously correlated to the Sanskrit terms for the stages of embryonic development, *kalala, arbuda, budbuda, peśī*, and *ghana*—that goes back as far as the *Mahābhārata* and the Pāli Canon.[205] Some texts, such as Drapa Gyaltsen's mid-twelfth-century *Great Jeweled Wishing Tree*, continue past these initial weeks by organizing development into abstract stages utilizing tantric vocabulary. In that text we saw that the ten incarnations of Vishnu designate ten stages of fetal development spread over ten months. Longchenpa uses some of this vocabulary, although not consistently. Kyempa Tsewang and Lodro Gyalpo, the two famous

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[205] For more on the various uses of the Sanskrit terms, see Suneson, "Remarks on Some Interrelated Terms in the Ancient Indian Embryology."

medical commentators, acknowledge these tantric models in their discussions of embryology as alternatives to the *Four Tantras*' view. Each of these scholars, however, presents the model differently. Kyempa Tsewang spreads the ten incarnations over ten months,[206] as does Drapa Gyaltsen, although the two disagree on the sequence of these stages. While Longchenpa places the fish, tortoise, and frog stages all within the first two months, Lodro Gyalpo reports on a tradition in which three stages—fish, tortoise, and pig—encompass the entire period of gestation.

The fact that these writers share an impulse to describe abstracted *stages* of development, rather than agree upon the actual details of what develops, suggests a structural correlation between embryology and models of the religious path that are prevalent in Theravāda, Mahāyāna, and Vajrayāna literature. The prolific publication in Tibetan literature after the twelfth century of texts describing grounds and paths point to this as a highly significant methodology in literature on spiritual development. Grounds-and-paths literature provides contemplatives with a detailed map of the Buddhist path. It is a map not of physical geography but of spiritual development; the grounds and paths are not physical locations but rather states of consciousness. Where grounds-and-paths literature describes a development of consciousness, embryology describes a development of physicality—and yet both accounts of development are presented by many authors in the same graded, sequential way.

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[206] Kyempa Tsewang's summary of tantric embryological narratives is at Skyem pa tshe dbang, *Rgyud bzhi'i 'grel pa*, 139-140.

II. Enacting embryology: models for change

If the compelling nature of the embryological narrative as a literary device in Tibet during these centuries can be explained in part by its structural affiliation with the popular grounds-and-paths genre of literature, what might this add to our understanding of how to read the plot of embryology? Firstly, it might indicate, as I have said, that embryology is often not so much about the growth of the literal embryo as it is about suggesting models of growth or change in general. If this is true, the author of an embryological narrative is governed by imperatives other than correspondence to the physical reality of an embryo. If we determine that embryology is primarily about presenting an abstract, idealized notion of growth, then, or about providing acceptable models for change, now we might ask, what are those models? How exactly is embryology used to express models of change in religious writings?

The next section will continue to address the question of what and who the stories of embryology describe. I will discuss three types of stories. The first, a Geluk tantric model, is a story about a contemplative who methodically and systematically progresses along a path to enlightenment, stepping through stages that are directly mirrored after life-stages as they are said to occur in ordinary existence. Using the power of meditation to visualize a more purified form of existence, this character systematically re-enacts those stages in the effort to cleanse him- or herself of the impurities of ordinary existence. In the second story, a Nyingma tantric model, the main character already embodies the essence of enlightenment within his or her own body; the path of practice for this figure also involves re-enacting the

processes of growth described in embryology in a purified form, and yet the means of doing this do not involve imagining oneself as a deity, but rather allowing one's inner enlightened essence to be released into the external world. Whereas in these two esoteric models the process of gestation is described as possessing the potential for enlightening experience, in the third model, from an early exoteric text by Gampopa, embryogeny is a wretched series of events that is wholly saṃsāric, a narrator's warning used to encourage religious practice.

II. a. The practice of purifying birth: A Sarma model

In many Buddhist religious traditions a correlation is made between the ordinary life processes of birth, aging, and death, on the one hand, and spiritual progress, on the other. Nowhere is the correlation between birth and liberation more overtly tied to Buddhist practice than in the tantras. Detailed contemplative practices modeled after the processes of human conception, development, and birth are present in a wide range of Indian Buddhist tantras, such as the *Kālacakra, Vajrabhairava, Guhyasamāja, Cakrasaṃvara, Saṃvarodaya,* and *Hevajra* tantras, as well as in numerous exegetical works. Knowledge of the mechanics of conception, gestation, and birth were utilized in the conceptualization of spiritual enlightenment in general and in the articulation of specific modes of practice. The requirements of a given author's preferred system of practice in turn affected how embryology was narrativized. For many Tibetan authors the correspondence between embryogeny and spiritual growth is explicit, but because full commentary on all such traditions could fill several volumes, my discussion here provides only selected examples of

how this correspondence was made. The following pages will thus highlight how two Tibetan traditions articulated the relationship between embryonic physiology and contemplative practice, making explicit the paradigm of birth as salvation.

In the first example, that of the Geluk tradition, a story is told using embryology that promotes a model of change that is sequential and hierarchical, enacted methodically through visualization of oneself as other in practices patterned after real life-stage events. Geluk texts describe practices in which meditators are to aim at liberation, defined as stopping the process of death and rebirth, through a series of practices modeled after the actual processes of death, intermediate state existence, and rebirth. The practitioner is advised to gain control over these life-stages by studying the tantric physiology of channels, winds, and quintessential essences, and by performing practices that mirror the processes of death, intermediate state existence, and rebirth by manipulating these aspects of the inner body accordingly.

The highest yoga tantra teachings in which these advanced practices occur appear at the pinnacle of the fourfold classification of tantric texts and practices into action (*bya*, Skt. *kriyā*), performance (*spyod*, Skt. *charyā*), yoga (*rnal 'byor*, Skt. *yoga*), and highest yoga (*bla med*, Skt. *anuttarayoga*) tantras. Each form of tantra prescribes a complex of different practices, which are said by some scholars to be aimed at practitioners of different contemplative capabilities.[207] The highest yoga tantra is generally distinguished by Geluk

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[207] This is debated. For a survey by Hopkins of Tibetan views on the purpose of the four tantra classes see Tsong-ka-pa, *Tantra in Tibet: The Great Exposition of Secret Mantra - Volume 1*, trans. Jeffrey Hopkins, The Wisdom of Tibet Series (London: George Allen & Unwin, 1977), 201-209 Also see Tsong-ka-pa, *The Yoga of Tibet: The Great Exposition of Secret Mantra - 2 and 3*, trans. Jeffrey Hopkins, The Wisdom of Tibet Series

scholars from the other tantras by its claim to facilitate enlightenment within a single lifetime. The highest yoga tantra path is traditionally divided into a generation stage (*bskyed rim*) and completion stage (*rdzogs rim*). Generation stage practices are preliminary procedures, preparing the mind for later completion stage practices. Through practices modeled after the ordinary life processes of death, intermediate state existence, and rebirth, the practitioner is told to overcome ordinary conceptions and ordinary appearances by visualizing him- or herself as a deity; this practice is known as deity yoga (*lha'i rnal 'byor*). The Geluk scholar Ngulchu Dharmabhadra (1722-1851) explains the etymology of "generation stage yoga" by stating, "It is called 'generation stage yoga' because one meditates by generating the vision [of the maṇḍala and its deities] as symbolic of the process of life, death, and bardo."[208]

Success in this type of meditation is said to result in the winds of one's subtle body entering, remaining, and then dissolving inside the central channel, whereupon one may begin completion stage practices. In an ordinary individual, the winds enter the central channel only at death—it is said that as an individual is dying, the winds of all seventy-two thousand channels throughout the body first gather in the right and left channels, then move into the central channel, until finally they dissolve into the channel-wheel at the heart. Losang Gyaltsen Senge (b. 1757) explains that the special "indestructible" quintessential essence that is considered the basis of the wind and the mind, and therefore the basis of all

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(London: George Allen & Unwin, 1981). For a presentation of highest yoga tantra according to the Geluk system as articulated by the nineteenth-century Mongolian scholar Ngawang Belden, see Daniel Cozort, *Highest Yoga Tantra: An Introduction to the Esoteric Buddhism of Tibet* (Ithaca: Snow Lion Publications, 1986).

[208] See Mullin's comments in Tsongkhapa Lobzang Drakpa, *Tsongkhapa's Six Yogas of Naropa*, trans. Glen H. Mullin (Ithaca: Snow Lion Publications, 1996), 257 ff. 21.

phenomena, is located at the heart, and that it survives until death. Death takes place at the moment when all other winds of the body dissolve into the indestructible quintessential essence and the very subtle wind at the heart.[209] Death occurs in this way, states the eighteenth-century Geluk scholar Yangchen Gaway Lodro in a Guhyasamāja-oriented treatise based on Tsong Khapa's work, "because, except for this very subtle wind, if the slightest wind that acts as a basis of consciousness dwells in any part of the body, death is not possible."[210]

The process of reaching this moment of death is explained as occurring in a series of stages during which the body's natural elements are said to dissolve sequentially into each other. Internal and external signs are described that identify which stage of dying a person has reached. Over a period of five cycles, the functions of the body are weakened: the body becomes thin and the limbs loose, one's vision and hearing diminish, food cannot be digested and one gradually loses consciousness.[211] The coarse types of mind dissolve at the fifth cycle, and from the fifth to the eighth cycles, increasingly subtle forms of mind dissolve sequentially until only the mind of non-dualistic "clear light" (*'od gsal*) remains, at which point the individual has died. The "clear light" stage occurs when the white and red quintessential essences dissolve into the white and red indestructible quintessential essences at the heart, and the winds gathered in the central channel dissolve into the very subtle wind.

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209 Blo bzang rgyal mtshan seng ge, *Dpal rdo rje 'jigs byed dpa' bo gcig pa'i rdzogs rim gyi rnam bzhag 'jam dpal dgyes pa'i mchod sprin* (Delhi: 1972), 3a.Translated in Hopkins and Rinpoche, *Death, Intermediate State and Rebirth*, 31-32.

210 Hopkins and Rinpoche, *Death, Intermediate State and Rebirth*, 32.

211 For charts detailing the stages of dissolution with the external and internal signs, and for a description of each stage, see Ibid., 17-18 and 32-46 .

"Through this," Yangchen Gaway Lodro explains, "the very subtle wind and mind that have existed in the ordinary state from the beginning are made manifest." He notes that this is therefore an experience of witnessing one's *own* unconditioned inner essence, and not a vision of an external light in the sky. This experience is also referred to as an attainment of the "basic" reality body, which may then be transformed into a Buddha's Reality Body (*chos sku*, Skt. *dharmakāya*).[212] Yangchen Gaway Lodro cautions that the clear light generated intentionally through meditation is not identical to the clear light experienced by an ordinary person at death: "the clear light of death that dawns for an ordinary person—not by the power of meditation but of its own accord—is a case of imputing the name 'clear light' to just a stoppage of gross dualistic appearance. It is not fully qualified."[213]

A body generally remains in the state of clear light for three days. When pus or blood is seen at the nose and sexual organs, this indicates that the consciousness has departed the body, and the body may be discarded.[214] Once the consciousness has left the body, it experiences a reversal from its state of clear light back through the seven stages of dissolution, and once this has been completed, the intermediate state begins and the being will begin its search for a new body into which to be reborn. Yangchen Gaway Lodro states that the actual moment of rebirth—that is, the moment that the intermediate state consciousness connects to the mixture of reproductive fluids in the mother's womb—is the moment when the

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[212] Ibid., 45. Hopkins' translation. Also see nga wang mkhas grub (1779-1838), *Presentation of Birth, Death and Intermediate State, skye shi bar do'i rnam bzhag*, The Collected Works, vol. 1 (Leh: S.W. Tashigangpa, 1972), 464.6. Also see Geshe Kelsang Gyatso, *Essence of Vajrayana: The Highest Yoga Tantra Practice of Heruka Body Mandala* (Delhi: Motilal Banarsidass, 2000), 78-79.

[213] Hopkins and Rinpoche, *Death, Intermediate State and Rebirth*, 48. Hopkins' translation.

[214] Ibid., 19 and 45-46. See 45-46 for exceptions to this general rule where certain people may remain in the state of clear light for less than or more than three days.

consciousness reaches the process of reverse dissolution upon entry into the womb.[215]

During contemplative practices modeled after rebirth, then, the meditator imagines him- or herself undergoing the process of conception and gestation as a deity. The contemporary Geluk scholar Kelsang Gyatso describes this practice as follows. After being told to visualize a maṇḍala in which is centered a union of a father's and mother's reproductive substances, the meditator is instructed to imagine entering these substances: "With the motivation to benefit all living beings, we... develop a strong wish to be reborn inside this union of Father Heruka's sperm and Mother Vajravarahi's ovum."[216] Conception occurs, and Kelsang Gyatso equates the subsequently visualized development of the syllable *Ḥum* with the growth of the fetus. Kelsang Gyatso explains,

> Through this meditation we can transform our experience of rebirth into the experience of the gross Deity body, which is the quick path of the Emanation Body of a Buddha. For this reason it is called 'bringing rebirth into the path of the Emanation Body.' It indirectly purifies ordinary rebirth, causes the completion stage realization of the gross Deity body to ripen, and sows in our mind a powerful potential to attain the actual Emanation Body of a Buddha in the future.[217]

In Geluk systems, this type of deity yoga, involving the meditative generation of oneself as other and the performance of certain activities in that form, is posited as the practice that distinguishes sūtric from tantric practice, and it is presented as a direct way of

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[215] Ibid., 60.
[216] Gyatso, *Essence of Vajrayana*, 86.
[217] Ibid., 88.

generating a Buddha's "Form Body" (*gzugs sku*).[218] When a practitioner is exhorted to purify ordinary death, intermediate state, and rebirth through the method known as "taking the three bodies to the path" (*sku gsum lam 'khyer*), these practices are ultimately aimed at actualizing the Buddha's three bodies. Hopkins and Lati Rinpoche explain,

> In the process of deity yoga, a yogi initially meditates on emptiness following the pattern of the eight signs of death, thereby bringing death to the path as a Buddha's Truth Body [i.e., the Reality Body]. The yogi rises from this non-dual realization of emptiness in the form of a seed syllable (a syllable from which the entire form of a deity appears) or hand symbol, etc.—the wisdom consciousness itself serving as the basis of emanation. This is how the intermediate state is brought to the path as an Enjoyment Body. The subsequent appearance of the wisdom consciousness in the form of a deity's body is the bringing of birth to the path as an Emanation Body. Emptiness and deity yogas patterned on the process of death, intermediate state and birth occur only in Highest Yoga Mantra, not in the three lower tantras—Action, Performance and Yoga.[219]

With detailed knowledge of the physiological processes that occur during ordinary death, intermediate state, and rebirth, the highest yoga tantra practitioner thus uses these

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[218] The Buddhist taxonomy of the three bodies (*sku gsum*) is alternatively described as twofold, comprised of a reality body (translated sometimes as "truth" body) and a form body, the former being equivalent to the reality body of the threefold scheme, and the latter being equivalent to both the enjoyment body and the emanation body. The aim of deity yoga practices such as those presented above in action tantra and highest yoga tantra is said to be the generation of a Buddha's form body. For the Mahāyāna practitioner, generation of the form body is considered centrally important, since it is this body that will appear to sentient beings and work for their welfare. Tsong Khapa's tradition argues that practitioners of the Perfection Vehicle (*phar phyin kyi theg pa*, Skt. *pāramitāyāna*) actualize form bodies; however, this occurs only over many lifetimes of performing meritorious activities. In deity yoga, by contrast, when the mind realizing emptiness is caused to appear as a deity, one simultaneously gathers both merit and wisdom, and so the accumulation of merit can occur much more quickly. Therefore, the tradition states that by utilizing the practice of deity yoga the state of Buddhahood can be reached sooner.

[219] Hopkins and Rinpoche, *Death, Intermediate State and Rebirth*, 69-70. A discussion of the practices of taking the three bodies into the path is also at Gyatso, *Essence of Vajrayana*, 77-88.

processes as objects of purification during the deity yoga of generation stage and completion stage meditation. Deity yoga practices require special attention to the nature of and usage of one's own ordinary physical body in the effort to reconfigure oneself as a deity.[220] The varied qualities of a practitioner's embodied condition are thus central to this type of tantric practice. The practices prescribed are directly modeled after life-stage events of ordinary existence. This provides a rationale for the detailed study of physiological processes: ordinary physiology is itself the guide to the most advanced forms of soteriological practices. The main character of these embryologically articulated stories is a figure who has systematically mastered the technicalities of ordinary physiology and who can effect his or her own transformation by proceeding methodically through a sequence of physiologically presented practices while visualizing him- or herself as an enlightened being.

II. b. Gestation recapitulates meditation: A Nyingma model

In some ways a correlate to the esoteric Geluk tradition described above, the Great Perfection (*rdzogs chen*) is considered the supreme vehicle in the Nyingma system of nine "vehicles" of thought and practice. While the eight lower Nyingma vehicles emphasize practices such as merit accumulation and purification of obstacles, Great Perfection practices are aimed at accomplishing a direct intuition of innate wisdom (*ye shes*, Skt. *jñāna*). Like their Geluk counterparts, Great Perfection contemplatives begin with practices from the lower vehicles, advancing to tantric practices only after completion of the standard set of

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220 See Gyatso, *Essence of Vajrayana;* Jeffrey Hopkins, *Tantric Techniques* (unpublished manuscript, 1995); H. H. the Dalai Lama, Tsong-ka-pa, and Jeffrey Hopkins, *Deity Yoga in Action and Performance Tantra*, trans. Jeffrey Hopkins (Ithaca: Snow Lion Publications, 1981).

"preliminary practices" (*sngon 'gro*), which involve taking refuge, prostration, generating *bodhicitta*, making offerings and performing purifications. Highest yoga tantra practices of the generation and completion stages (*bskyed rim* and *rdzogs rim*), common to other schools of Tibetan Buddhism, are also performed by Great Perfection contemplatives, involving mantra recitations to various deities and completion stage subtle body yogas. Only after mastering these complex systems do practitioners engage in specific Great Perfection practices known as "breakthrough" (*khregs chod*) and "direct transcendence" (*thod rgal*). In this section I will discuss the dialogic relationship between these contemplative practices and the articulation of embryology in Great Perfection literature.

In his *Treasury of Precious Words and Meanings*, the fourteenth-century Nyingma scholar Longchenpa records a reworking of tantric paradigms of enlightenment that relies on poetic uses of traditional Buddhist symbols.[221] Central to Longchenpa's text is an account of the human body—including a very long narrative of embryogeny—in which the body itself hosts a playful dance of delusion and enlightenment. According to Longchenpa's cosmogonic presentation of the esoteric Great Perfection doctrine, existence spontaneously arises from "the Ground" (*gzhi*), which, prior to its manifestation, is metaphorically imaged as a "youthful body in a vase" (*gzhon nu bum pa sku*). The drama that ensues upon the Ground's manifestation is scripted by the ordinary human's perception and interpretation of experience: as long as karmically determined distorted perceptions dominate human experience, cyclic existence continues. Releasing oneself from this distorted mode of perception, thereby allowing progress toward enlightened experience, is the project of the

[221] I am indebted to David Germano for sharing his translations of and research on Longchenpa's work.

Great Perfection contemplative, and, as in other tantric traditions, the worksite for this project is the body itself.

In the early chapters of the *Treasury*, Longchenpa locates within each sentient being's body an enlightened essence, which is identified with the Ground. In chapters two and three of the *Treasury*, this pure energy of the Ground is identified as the very source of our physical and psychic being. As such, it is said to be located in literal and symbolic ways throughout the psycho-physical body. Enlightenment depends on a recognition of this essence that will allow its energies to surface from the obscuring depths of perceptual error. This, of course, is the traditional Buddhist teaching that all beings possess within themselves a "Buddha-nature," which is explicitly the subject of the *Treasury*'s third chapter. How does the notion that every sentient being possesses an enlightened essence affect this tradition's presentation of gestation and birth?

In but one of many passages making the correlation between meditation and embryology clear, Longchenpa writes that "birth and death are the optimal measures of familiarization with reality itself."[222] Longchenpa cites an eloquent passage from the *Garland of Precious Pearls* tantra that explains how events in which change is inscribed within the body are events in the storyline of the path to enlightenment:

> Entering the womb
>
> Is the manifestation of self-awareness from the Ground;
>
> With the initial seven weeks of the embryo's development,

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[222] Klong chen pa, "Theg mchog mdzod," in *Mdzod chen bdun* (Gangtok, Sikkim: Sherab Gyaltsen and Khyentse Labrang, 1983), 297.7. Germano's translation, in Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings*, 602.

The measures of contemplative realization are attained;

With the total ten months, the spiritual stages are traversed;

Birth is arising in the Spiritual Bodies;

Your body's development is the objective sphere of the Ground-presensing,

While remaining in your body is the Ground;

Through aging, distortion is cleansed away;

Sickness is the assurance of realization,

And through death you are freed into reality's emptiness.

Manifesting thus, all sentient beings

Are effortlessly and primordially free...[223]

The normal life cycle events of one's own birth, illness, aging, and death are used as symbolic correlates to spiritual progression, which is are articulated here as a sequence of events experienced through the body. David Germano thus explains that spiritual attainments are presented by Longchenpa as events that are not understood through intellectual speculation, but rather understood through the experience of the body itself.

Emphasizing the ultimate purity of cyclic existence, Longchenpa associates ordinary, impure physical objects with the pure dimension of existence from which they originate. "Since all the appearances of cyclic existence's three realms are initially apprehended and abstracted out from the dimension of the [Ground's] expanse," Longchenpa explains, "each exists in intimate correlation with that dimension."[224] Explaining that enlightened reality is

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[223] Cited by Longchenpa in Klong chen pa, "Theg mchog mdzod," 112.2. Germano's translation, in Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings*, 596.

[224] Klong chen pa, *Tshig don mdzod*, 196. Germano's translation, in Germano, *The Treasury of Words and Meanings*, 42.

present within the body at all times, Longchenpa links the stages of human existence to the three spiritual bodies, as in other tantric traditions: birth (*btsas pa*) is correlated with the Emanation Body, taking form in a physical existence (*lus gnas*) with the Enjoyment Body, and death (*shi ba*) with the Reality Body.[225]

In this model, enlightened reality is not a distant goal to be manufactured, but rather it is an inherent aspect of the existence humans inhabit right now. The purity that is symbolically represented by the five Buddha families appears during embryogeny as five tiny letters, or syllables, that manifest inside the channels of the embryo. These letters are also correlated to the pure seed syllables that are said to yield the Buddha Bodies during contemplative visualization practices. As in the Geluk example above, this physiology justifies religious practices that require an intimate knowledge of the body. Longchenpa explains,

> Thus the body of the visionary is present with the identity of the three Spiritual Bodies. To expand on that, by understanding the characteristics of the body's origination, you attain certainty as to the Reality Body; by understanding its endurance, you likewise attain certainty as to the Enjoyment Body; and by understanding its destruction, you attain certainty as to the Emanation Body.[226]

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225 Klong chen pa, "Theg mchog mdzod," 111.6-7. Referred to in Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings*, 581. In still another model of this type of correlation, Broido reports that Sonam Tsemo (*sa skya pa bsod names rtse mo*, 1142-1182) and Tashi Namgyal (*sgam po pa bkra shis rham rgyal*, 1512-1587) both link the four stages (*gnas pa bzhi*) of the development of the fetus (*gong bu, chu, gzugs*, and *gzugs las 'das pa*) to a schema of four Buddha Bodies, the *sambhogakāya, dharmakāya, nirmāṇakāya,* and *svabhāvikakāya,* respectively. M. Broido, "bsad thabs: Some Tibetan Methods of Explaining the Tantras," in *Csomo de Koros Symposium*, ed. Ernst Steinkellner and Helmut Tauscher, Wiener Studien zur Tibetologie und Buddhismuskunde (Velm-Vienna, Austria: Arbeitskreis fur Tibetische und Buddhistische Studien Universitat Wien, 1981), 17 ff. 13. Interestingly, I have not seen this scheme of four stages of fetal development repeated in medical texts.

226 Klong chen pa, "Theg mchog mdzod," 344.2. Germano's translation, in Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings*, 583.

In Longchenpa's view, although the three Buddha Bodies are located within the ordinary human body, during the process of ordinary embryonic development this pure dimension was generated in a distorted way. This doctrine thus justifies the importance of embryology as a topic of study for the religious practitioner: it is essential to understand the process of embryogeny in order to fully comprehend the causes of saṃsāric existence and the true nature of our essential enlightenment. Understanding the distortions that result in ordinary saṃsāric existence is the key to purifying or reversing the process, clearing up the distortions and revealing one's pure enlightened existence.

The general notion that one can meditatively re-enact one's birth, and the physiological processes of embryogeny that result in birth, for a soteriological end is similar in the Geluk and Nyingma esoteric traditions described here. Great Perfection literature goes a step beyond correlating the stages of human existence to spiritual rebirth, however: for Longchenpa, the very details of embryonic growth are explicitly scripted to express the relationship between the generation of an ordinary being and the generation of an enlightened being. Longchenpa's account of early embryogeny offers an unusual analysis of the growth of the subtle body. In this narrative, circulatory channels emerge in the embryo's body during the first two weeks of gestation; subtle letters subsequently appear within those channels and two tiny "eyes"—called the "eye of the lamps" (*sgron ma'i spyan*) and the "eye of the elements" (*'byung ba'i spyan*)—are formed. These embryonic eyes are directly correlated with subtle innate wisdom (*ye shes*), a discursive turn of events that is essential to the presentation of Longchenpa's contemplative system, which appears later in the *Treasury*.

As it happens, the eyes are especially important in Great Perfection practice because they are said to act as the conduit for the transmission of enlightened energy from internal to external areas of the body.

Longchenpa's narrative details a series of very subtle light channels (*'od rtsa*) throughout the body, two of which travel from the eyes to the heart, the heart being the primary location of the individual's enlightened essence.[227] A network of pathways running throughout the entire body and originating in the heart, which is the concentrated locus of the body's enlightened essence, these light channels are a unique feature of the Great Perfection tradition. Germano points out that unlike the network of channels typically described in other systems of tantric physiology, which are said to operate in both impure and pure modes, carrying the ordinary bodily fluids of saṃsāric existence as well as the purified substances and energies of enlightened existence, the light channels are conduits of pure energies alone. The tradition explains that during the contemplative practice known as direct transcendence (*thod rgal*), when a portion of this enlightened essence has left the heart

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[227] Germano explains that the transition of the enlightened essence from its home at the heart outwards is described using the terminology of the "four lamps" (*sgron ma*), known as the far-ranging lasso water lamp (*rgyang zhags chu yi sgron ma*), the empty quintessential essence lamp (*thig le stong pa'i sgron ma*), the thoroughly pure expanse lamp (*dbyings rnam par dag pa'i sgron ma*), and the self-emergent wisdom lamp (*shes rab rang byung gi sgron ma*). Discussed in detail in the *Treasury's* sixth chapter, the far-ranging lasso water lamp, located in the eyes, refers to the tip of the light channels running from the heart to the eyes; the empty quintessential essence lamp and the thoroughly pure expanse lamp are terms used to describe two types of visions seen in direct transcendence meditation; and the self-emergent wisdom lamp refers to the enlightened essence itself, located in the heart. Because the far-ranging lasso water lamp also more generally represents the entire network of light channels that are the pure, enlightened physiological structure of the body, it can be considered the primary lamp of the four. In describing this lamp, Germano points out that Longchenpa is careful to distinguish between the light channel that enables the visions (*'od snang*) that occur in the practice called "direct transcendence" and the visual pathways of the ordinary eye that facilitate the vision of distorted samsaric appearances (*'khrul snang*). The far-ranging lasso water lamp is described at Klong chen pa, *Tshig don mdzod*, 263-265. See translation at Germano, *The Treasury of Words and Meanings*, 115-119. See also Germano's dissertation, chapter ten.

through the light channels and exited the body at the eyes, it manifests as visions. Contemplatives see maṇḍalas of rainbow-colored light that are to be understood, therefore, as an out-flowing of their own enlightened essence, and as such, they are in fact visions of the true nature of reality, seen without the distortions of ordinary saṃsāric conceptuality.[228] Ultimately, in the course of these practices the contemplative's material body may dissolve completely, leaving only the rainbow-colored light of the enlightened essence, a form of spiritual liberation known as achieving a "rainbow body" (*'ja' lus*).

In direct transcendence meditation, the enlightened essence concentrated at the heart is aroused by focusing on an external light source, such as the sun or a lamp, and it flows outward through the light channels via the eyes, which are known as the "door" or "gateway" (*sgo*) of innate wisdom. Longchenpa cites the *Blazing Lamp* tantra:

> From the white conch shell house of the brain,
>
> The channel which has three curls to the right
>
> Is shaped like a buffalo's horn.
>
> This luminous channel, aka the water lamp itself, resides within this channel
>
> Which brings about the shining forth of sensory faculties' objects,
>
> In its subsuming all the vibrant energies of the sensory faculties.
>
> At the time of residing in the mother's womb
>
> When one's own body is first developing,
>
> Within the vibrant energies of the entire body

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[228] Compare this to Yangchen Gaway Lodro's comment, noted above, that the experience of clear light is an experience of witnessing one's *own* unconditioned inner essence, and not a vision of an external light in the sky. While the discourse couching the description of these experiences is generally quite different in the Geluk and Nyingma models presented here, further research would clarify the similarities, differences, and historical connections between these two accounts of visionary experience.

The great channel knot of the navel wheel originates,

And in its triangle at the embryo's center

Via the vibrant energies of the paternal cause and maternal condition

The eyes' orbs develop.

Furthermore, the eyes' combination of white and black

Derives from the paternal and maternal elements respectively;

The gateways of innate wisdom's shining forth are these two eyes.[229]

The two eyes mentioned here are those that develop at the embryo's navel during the first week of gestation, the "eye of the elements" and the "eye of the lamps." The father's reproductive substance, said to be white in color, and the mother's, typically said to be black or red, are here given direct responsibility for the development of these eyes, the most important part of the developing embryo's body in Longchenpa's narrative. Germano notes that elsewhere in his corpus Longcenpa also quotes the text, *The Totally Radiant*, as another early source to mention the embryogenical primacy of the eyes:

The initial origination of the body takes hold from the eyes,

Via being connected to the two eyes at the navel;

They come into being within the channel-knot.[230]

The subject of Longchenpa's story is encouraged to see him- or herself as essentially enlightened. The process of religious transformation for this figure involves relaxing the rigidity of distorted, ordinary perceptual habits and releasing the radiant, internal light

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[229] Klong chen pa, *Tshig don mdzod*, 261. In translation(with some minor changes) at Germano, *The Treasury of Words and Meanings*, 113-114.

[230] Germano's translation, in Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings*, 960.

within through intimate knowledge of his or her own physiology. By placing the development of the eyes in the earliest stages of embryogeny, the embryological narrative itself is manipulated to provide a roadmap for spiritual practice in the very origins of the body. Thus not only do narratives on meditation draw on embryological symbolism, but the reverse is also true: embryological narratives rely on religious or philosophical discourse.

II. c. The misery of the womb and the wretchedness of birth

Quite unlike the tantric models just described in which a direct correlation is made between the ordinary life processes of birth and death and spiritual *progress*, in the next model, gestation, birth, and ordinary existence are characterized as hopelessly, insufferably wretched. The first of the Four Noble Truths of Buddhism posits the experience of suffering as the most basic feature of existence, and Buddhist traditions ever since have lavishly narrated the various ways that human existence is essentially an experience of suffering. Early Indian Buddhists saw the events of birth, aging, and death as evidence of the inevitable misery of human existence. Labeling these life events the "enemies" of human existence, the author of the early Indian *Aṭṭhasālinī* mirrors a Vaibhāṣika view, likening birth to an enemy who carries a man off to the jungle, aging to an enemy who strikes a man to the ground, and death to an enemy who beheads a man.[231] The *Entry into the Womb* sūtra outlines a traditional scheme of eight ways in which human existence is characterized by suffering: "Thus (1) birth, (2) old age, (3) illness and (4) death are each misery; as is (5) to be separated from those who are dear, and (6) to meet those who are not dear to us, (7) not to obtain

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[231] Cited in Herbert V. Guenther, *Philosophy and Psychology in the Abhidharma* (Berkeley: Shambhala, 1974), 173-174.

what we covet is misery and (8) the difficulty of guarding our possessions."[232]

Composed in twelfth-century Tibet, Gampopa's treatment of embryology occurs within a tripartite presentation of suffering derived from the Buddhism of the Pāli Canon: the misery of conditioned existence, the misery of change, and the misery of misery. A teaching on the vicious state of saṃsāra for the student of Buddhist meditation who needs an antidote to attachment to sensual pleasures, the topic of the "misery of misery" includes first a description of the "misery of evil existences," which details the ways in which beings in the various Buddhist lower realms, such as animal realms and hell realms, suffer; and next a description of "the misery of happy existences," which describes the forms of suffering of those born into the higher realms of existence—humans, demi-gods, and gods. The teaching claims that once one understands through meditation the transitory and miserable state of saṃsāric existence, one feels compelled to strive energetically toward a more enlightened manner of existence.

The embryological narrative in this tradition occurs within teachings on the misery of ordinary existence. Gampopa's narrative states that if one becomes convinced of the misery of entering the womb, one will want to do it never again. He cites the *Entry into the Womb* sūtra, saying,

> Alas! Since this ocean of transmigratory existence is aflame, burns and blazes, not a single individual is unaffected by it. This blazing fire is that of attachment, antipathy and bewilderment, of birth, old age and death, of mourning, lamentation, distress and affliction.

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[232] Cited in *Jewel Ornament*, 63.

It is always burning and ablaze, not a single individual escapes from it.[233]

This account of gestation records how the fetus suffers in the womb during the thirty-eight weeks. In the first week, the oval-shaped, runny substance feels as if it is being boiled and fried in a pan, and the consciousness and sense organs experience intense pain. In the second week, the embryo is transformed into an oblong, gelatinous substance, and the four elements are manifested—earth, water, fire, and wind, symbolizing solidity, cohesion, temperature, and mobility. In the third week, wind strengthens the power of the four elements, and the embryo becomes a ladle-shaped lump.

In the seventh week, the hands and feet are produced, and the embryo experiences a pain as if it is being pulled by a strong wind and spread out with a stick. The nine orifices of the body are produced in the eleventh week, and the embryo suffers as if it were an open wound being jabbed by a finger. In the thirty-seventh week, the fetus experiences the need to escape the dirty, malodorous, imprisoning darkness of the womb, and in the thirty-eighth week wind pushes the fetus toward the mouth of the womb, an event which the fetus experiences as being crushed by machinery. Feeling as if it is being squeezed through iron netting, the fetus is born.

Gampopa goes on to say that the fetus is further victimized by the actions of its environmental host. If the mother eats cold food, the embryo feels like a nude person thrown onto ice. When she eats too much, the embryo feels as if it is being crushed by rocks. When

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[233] Ibid., 68-69.

the mother has sexual intercourse, the embryo feels like it is being pummeled by thorns.[234] The narrator reminds the audience that some children are still-born, and others die during childbirth. Suffering only continues after release from the womb:

> ...when in the process of birth the child is put on the ground it feels the pain of being laid on a rough coat. At a later stage it suffers the agony of being scraped on the edge of a wall and of its skin being peeled (when it is washed the first time, as the skin is so sensitive). For a long time the newly-born stays in misery and suffers much pain, heat, darkness and unpleasantness If you were offered three gold coins to remain two days and nights in an unclean closed pit, you would not accept, however much you might want the money, and yet the misery of being in a womb is worse than that.[235]

For the Buddhist narrator of Gampopa's story, the presentation of gestation and birth is an opportunity to demonstrate the intensity of suffering experienced in the human life. "If we are convinced of such misery," he argues, "we should be haunted by the fear of entering the womb."[236] In this model of embryology we witness the story of an individual who experiences little but the continuance of deprivation from lifetime to lifetime. The embryo's perception of its environment, the womb, is of a house of horrors. This miserable

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234 Guenther states that a similar account is found in the Great Perfection text, the *rdzogs chen kun bzang bla ma.* Ibid., 73 ff. 45.

235 Ibid., 65-66. Guenther's translation.

236 Ibid., 66. Guenther's translation. A similar presentation of embryology to that of Gampopa's is seen in the sixteenth-century Sakya *lam 'dre* path text by Ngorchen Konchog Lhundrup (ngor chen dkon mchog lhun grub, 1497-1557), a text that is translated as Ngorchen Konchog Lhundrup, *The Beautiful Ornament of the Three Visions: An exposition of the preliminary practices of the path which explains the instructions of the "Path Including its Result" in accordance with the Root Treatise of the Vajra Verses of Virupa,* trans. Lobsang Dagpa and Jay Goldberg (Ithaca: Snow Lion Publications, 1991), for example, see pgs. 40-41 on the suffering of birth. On a similar attitude toward the womb in the Hindu epic, the *Mahābhārata,* see Harold G. Coward, "Purity in Hinduism: With Particular Reference to Patañjali's *Yoga Sūtras,*" in *Hindu Ethics: Purity, Abortion, and Euthanasia,* ed. Harold G. Coward, Julius J. Lipner, and Katherine K. Young, McGill Studies in the History of Religions (Albany: State University of New York Press, 1989), 17.

character is offered a lifeline of exoteric Buddhist practice as a means for escaping the thoroughly wretched cycle of ordinary existence.

III. Telling stories of transformation

The question of whether an ordinary human's body is host to an enlightened essence is of great importance in the intellectual history of Buddhism. The Great Perfection, with its poetically narrated Buddha-nature teachings and positive descriptions of enlightenment, is often contrasted to the more scholastically narrated, logically rigorous Geluk tradition; the latter is sometimes accused of describing enlightenment negatively, as an absence of defilements, rather than positively, as the presence of enlightenment. While one must be cautious about exaggerating this bifurcation, the significance of narrative discourse must be noticed. Buddhist literature of the Nyingma school is known in particular for its heavy reliance on allegories and metaphorical, poetic language, a stylistic choice that implies a rejection of the logical analytical rhetoric favored by much of Buddhist scholasticism. Thus the Ground is poetically rendered as the "youthful body in a vase," where the young body, symbolic of fresh, unsullied potential, is concealed within a vase, the former representing the Ground's spontaneous presence and the latter the Ground's emptiness or original purity. The image of the youthful body in a vase also refers to the Buddha-nature, the enlightened nucleus that lies within the body of each sentient being and is yet obscured by the perceptual errors of sentience.

Such a poetic use of language is sometimes said to value the "emotional" experience of the audience or the reader in reaction to the sound, appearance, or syntagmatic

connotations of the language used. Contrasted to a use of language that depends on the existence of a correspondence between the "correct" interpretation of words and the confirming presence of a structure that is described by them, the key to poetic language and its function steps beyond such necessary correlation. Poetic metaphors, in which lexically odd terms are placed together to create an act of semantic impertinence, work to create new meanings that step beyond literal words, and this type of language places a special importance on the reader's imagination and the ability to see something as something else despite differences. This understanding of metaphorical language also puts emphasis on an aesthetic appreciation of the world, which may be experienced in ritual, symbolic, or artistic activity, and which serves to help re-create one's life-world, a central goal of much religious activity.

Metaphors of containers and their contents are frequently used in Great Perfection descriptions of the possibility of enlightenment. Containers may be vases, bodies, hearts, eyes, wombs, or eggs; these containers are said to hold within them a concentrated, essentialized form of the Ground. Such images emphasize the experience of the human body—surely the most intimately direct experience of a container. The human body itself is the most prominently used container metaphor in Buddhist tantra in general. Within the body, the heart, as the essential core of the body, is imaged as the central container: "The real site of awareness' primordial gnosis is within the precious sacred knot of our heart,"[237] Longchenpa writes. Similarly the metaphor of birth is used to reflect experiences of being

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237 Klong chen pa, *Tshig don mdzod*, 229. Germano's translation, in Germano, *The Treasury of Words and Meanings*, 76.

propelled forth toward a new existence, just as the direct transcendence contemplative experiences of projected vision release that which was held within toward an experience of boundary-less integration with one's environment.

Such poetic and dramatically rendered embryological metaphors—containers pregnant with potential; the bursting forth of interior energies that realize themselves in exterior manifestation—are particular to Nyingma narratives. In the Geluk highest yoga tantra teachings initiated by Tsong Khapa a century after the writings of Longchenpa, embryology, while still important symbolically, is portrayed in much more technical manner. The subject of the Geluk story is led along a sequential path shaped via the technicalities of physiological processes and is encouraged to perform, in the guise of another, a series of methodically hierarchical practices that are literally modeled after ordinary life-stage events. The subjects of both of these tantric narratives are clearly characterized in a radically different way than the miserable subject of Gampopa's narrative. The lurid discourse of the misery of the womb is used in that exoteric model as a threat to instill religious values in the figure burdened by the suffering of existence itself.

In this chapter I have recounted stories of transformation that situate the seeds of change in the very origins of the human body. In the physical realm these narratives start with conception and end with birth; in the symbolic realm they start with saṃsāra and end with Buddhahood. In these examples we have also seen the workings of the narrative's plot—the "intelligible whole that governs a succession of events in any story"[238]—in the soteriological priorities articulated by each tradition. These stories have been enacted by

[238] Ricoeur, "Narrative Time," 167.

characters of different types. Some looked to the model of birth as liberative, as an opportunity to re-create or re-envision one's body, and therefore one's existence, in a deified form. Others looked at birth as evidence of the unarguable wretchedness of saṃsāra. Significantly, metaphors in each of these embryologies are crafted from the perspective of the embryo, and not the perspective of the pregnant women—it is the embryo, or the practitioner who imagines him- or herself embryologically, who will ultimately be released, liberated into a more integrated, less confined form of existence.

This chapter has considered the fictional, "intended" audience (the meditator as reader) of religious embryological narratives, who is also simultaneously cast as a character (the embryologically envisioned meditator). But there is more to say about how a story progresses, and about what moves it along. A feature of Hayden White's definition of narrative that I have not yet addressed involves an explication of the necessary connections between events. The next chapter, therefore, will be about what makes the story move. What causal elements drive the events of the story? This will also tells us more about how the discourse of embryology is used to market acceptable models of change. The next chapter will also consider the ethics of story-telling, for when we tell a story we inevitably value certain courses of action over another.

CHAPTER 5. FORCES OF CREATION: ETHICS OR EPISTEMOLOGY ?

Describing the most dramatic transformation we can experience, embryology is fundamentally about change. A venue for discussing what causes growth and how change occurs, it is about "becoming" as much as "being." Whereas many Western philosophical systems are based primarily on a study of being, conversely several of the most influential Buddhist doctrines are derived from a concern with the concept of becoming. Buddhists throughout history have concerned themselves with describing how change and development occur in the various realms of human experience. Defining such metaphysical concepts and integrating them into systems of thought and practice is central to Buddhism from its earliest origins in India, and embryological narratives have proven to be a compelling means of expressing these difficult concepts.

There has always been a tension in Buddhism regarding the discourse of being, articulated in Buddhism as the discourse of the self. In chapter one I mentioned that the Buddhist aversion to a language of the self required Buddhists to modify known Hindu accounts of human development. Early Indian Buddhist scriptures grounded refutations of the concept of self in brahmanical philosophies in the complex task of defining "self," although, in fact, early Buddhist definitions of self were often difficult to distinguish from those of the Hindus.[239] In many scriptures the existence of a self was not denied outright;

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[239] David Seyford Ruegg, *Buddha-nature, Mind and the Problem of Gradualism in a Comparative Perspective: On the Transmission and Reception of Buddhism in India and Tibet* (New Delhi: Heritage Publishers, 1992), 19.

Indian Buddhists simply rejected the existence of a *permanent* self. In other scriptures an aggressive rhetoric outlawed the possibility of an existent self of any kind. Variations in this issue led to hermeneutic maneuvers in which later commentators labeled certain teachings as definitively the word of the Buddha, and others as only interpretively so.

The effort to explain the nature of phenomena without positing their permanent existence led to highly developed theories of causality in Buddhist literature. Specific theories about how events are caused abound in early Indian thought,[240] and prominent scholars have gone so far as to claim that the foundation of Buddhism is a theory of causality.[241] In *Causality: The Central Philosophy of Buddhism,* Kalupahana cites early Buddhist texts that situate the role of causality in every realm of existence: in the inorganic physical world, the organic physical world, the sphere of thought or mental life, the social and moral realm, and the realm of higher spiritual life.[242] In chapter three I discussed cosmogony, the causation of the physical world, and that chapter's comments on Buddhist taxonomies of embodiment began to address the effects of causality in the social realm as well, as bodies were classified by gender and other morally charged characteristics. In chapter four, I considered the symbolic subjects of embryological narratives, and the discursive strategies used in those narratives to describe the religious path. That chapter showed that for Tibetan writers the composition of

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[240] Some of these are summarized in W. S. Karunaratne, *The Theory of Causality in Early Buddhism* (Nugegoda, Sri Lanka: Indumati Karunaratne, 1988), 1-17.

[241] Kalupahana, *Causality: The Central Philosophy of Buddhism;* Karunaratne, *The Theory of Causality in Early Buddhism.*

[242] The inorganic physical world (Skt. *utuniyama*), the organic physical world (Skt. *bijaniyama*), the sphere of thought or mental life (Skt. *cittaniyama*), the social and moral realm (Skt. *kammaniyama*), and the realm of higher spiritual life (Skt. *dhammaniyama*). Kalupahana, *Causality: The Central Philosophy of Buddhism,* 110.

embryological narratives was far from formulaic, and that some authors carefully manipulated the details of embryology to support their doctrinal systems. Embryology allowed these writers to temporalize doctrinal issues; as narrative theorist D. Ezzy writes, "Emplotment endows the experience of time with meaning."[243] The "emplotment" of embryological narratives transforms the sequence of events in embryogeny into stories with specific rhetorical functions, and it thereby imbues doctrine with a sense of time. Ricoeur explains further that "The plot, therefore, places us at the crossing point of temporality and narrativity: to be historical, an event must be more than a singular occurrence, a unique happening. It receives its definition from its contribution to the development of a plot."[244] In this chapter, I will continue the discussion of embryological stories and their plots by considering the mechanics of causation in rebirth and growth. At the same time, I will begin to consider the "emplotment" of the narration of Tibetan embryology itself. How did embryological narratives interact with each other and with their literary environments during this period of Tibetan history? What might embryology tell us about the historical transformation of medical and religious forms of literature?

I. Karma and the Buddhist problem of causality

In the doctrines of the Pāli Buddhist canon, humans are said to be composed of five aggregates (Pāli, *khandhas*): the material body, feelings, perception, predispositions, and consciousness. The proportions of these aggregates are continually shifting, and an individual

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[243] Ezzy, "Theorizing Narrative Identity: Symbolic Interactionism and Hermeneutics."
[244] Ricoeur, "Narrative Time," 167.

is therefore considered not continuous from moment to moment as a stable, unchanging entity. Misperception of the basic fact of substantial instability, or impermanence, and the imposition of a stable, constant "self" upon this shifting configuration of aggregates, is in Buddhism considered the central downfall of humankind. Belief in a self that underlies or unites the aggregates into one, the Buddha taught, is the root of all human suffering.

The problem with this theory was how to deal with the continuity asserted by the process of rebirth. To this end, as Lobsang Dargyay summarizes, Vasubhandhu commited a chapter in the *Abhidharma* to a discussion of karma. Vasubhandhu explains that the world was created not by an all-powerful deity but by the acts of sentient beings themselves. An act, in Sanskrit "*karman*," was defined as both an intention, a mental or spiritual act, and the physical or verbal act itself. Dargyay notes further that because Buddhist philosophers understood karma to include volition (the mental act), action (the physical or verbal act), and also the results of action, "actions leave upon the actor a trace or imprint that has an effect on the actor's future."[245] The question of how the karmic traces are transferred over lifetimes becomes especially thorny given the Buddhist doctrines impermanence and no-self, and, Dargyay comments, untangling this quandry as a contentious issues throughout hundreds of years of Buddhist philosophy.[246]

In the philosophical system of the Buddhist Sautrāntika school, Dargyay summarizes,

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[245] Lobsang Dargyay, "Tsong-Kha-Pa's Concept of Karma," in *Karma and Rebirth: Post Classical Developments*, ed. Ronald W. Neufeldt, SUNY Series in Religious Studies (Albany: State University of New York Press, 1986), 169.

[246] For a brief overview of how this issue is considered according to Tibetan philosophers see Ibid., 169-171. For an interesting discussion of medieval Theravāda views on karma's relationship to rebirth, see Matthews, "Post-Classical Developments in the Concepts of Karma and Rebirth in Theravada Buddhism."

an action results in an imprint (*bags chags*, Skt. *vāsanā*) that requires a base on which to be imprinted, and this base is the consciousness, or "stream of awareness" (*rnam par shes pa*, Skt. *vijñāna*), an entity that continues to another life after death. This imprint is thus carried with the consciousness until it comes to fruition. Other schools of Buddhist thought modified this theory. The Cittamātra school believes that the imprint is held in a special type of morally neutral consciousness called the "storage awareness" (Skt. *ālayavijñāna*), an impermanent mentality that is nonetheless uninterruptedly continuous, and that is distinct from the other six sense consciousnesses. While the view of the Svātantrika-Mādhyamika school was quite similar to that of the Sautrāntika, the Prāsaṅgika-Mādhyamika rejected the notion of a required base on which imprints are left behind. In Prāsaṅgika philosophy, therefore, an action results in a "potential" (*nus pa*) that requires no base or support because it is not an inherently real phenomenon.[247]

By the fifteenth century in Tibet, controversy over these issues had not abated among religious philosophers. In a presentation of the Prāsaṅgika view of karma, the Geluk school's founder Tsong Khapa (*tsong kha pa*, 1357-1419) claims that the completed act (*las zhig pa*) is itself an "object" or "thing" (*rdzas* or *dngos po*; Skt. *vastu*).[248] In Tsong Khapa's view, the act that has been completed is not simply a negativity; rather, that completed act is itself a "functional thing" in its own right that carries a potential to ripen into an effect, or karmic

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[247] Dargyay, "Tsong-Kha-Pa's Concept of Karma," 172.

[248] The concept of impermanent objects or things is fundamental to the Tibetan Buddhist philosophical worldview, which divides all phenomena into two categories: one, objects or things (*dngos po*), which are caused and impermanent and which in turn can produce effects or karmic fruits; and two, that which is permanent and does not participate in causality (*dngos po med pa*).

fruit, should all additional required conditions be present. Thus there are four aspects in the causal chain of karma: volition, action, completed action (which is itself a thing capable of causation), and the effect of the action. This view was not uncontroversial in Tibetan philosophy, however. The fifteenth-century Sakya philosopher Gorampa (*go rams pa bsod nams seng ge*, 1429-1489) indicted Tsong Khapa's view as non-Buddhist, claiming that Tsong Khapa's notion of the substantial completed action was a Vaiśeṣika theory.[249]

The notion of karmic causality is clearly an historically and systematically complex phenomenon. Although it is but one aspect of Buddhist causality theory overall, karmic causality is at the root of much of Buddhist thought and practice. In discussions of the body at the level of embryogenical development, concerns with the workings of karma and the effects of behavior are at the heart of debates in both medical and religious systems. Many of these systems award karma a significant, motivationally shaping role in the creation of the human body. In this chapter I will discuss how embryology is used to express a range of Buddhist notions of causation, change, and growth. I will focus on four models of causation found in twelfth- to sixteenth-century Tibetan embryologies: a model where the primary causal force is karma, another where the primary forces of growth are the body's energetic winds, yet another where the primary forces are all of the natural elements together, and, finally, a model where the primary force of growth is the wisdom of a Buddha. Over the course of this chapter, by examining the presence in embryological discourse of competing models for causation and human growth, we will see that while karma was vital to some

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[249] For source citations for this debate see Dargyay, "Tsong-Kha-Pa's Concept of Karma," 176.

models, others emphasized the power of other psychosomatic features of the individual to effect change. In this discussion we will observe once again that embryology is at the center of a fundamental Buddhist concern, explored here through discussion of the role of karma in becoming human and disagreement over the primary forces that motivate human development.

As I trace these four models in a variety of writings on embryology, a relationship between these notions of causality and the multifarious complexities of Buddhist practice will become evident as well. The issue of causality provided a framework for a particularly divisive problem central to the definition of Buddhism in its various forms as it spread throughout Asia. Proponents of these positions are often simplistically referred to as defenders of "sudden" or "gradual" enlightenment, by Buddhist writers themselves as well as in secondary literature. The crux of this problem can be characterized generally as an idealized polarity between those who conceptualize enlightenment as an effortless leap into an ineffable, fundamentally innate state of experience, and those who present enlightenment as a gradual process of growth in which there are identifiable stages of development to be learned and mastered. Around this basic polarity, which flavored the various stories of transformation in chapter four, hovered a number of related dichotomously defined concerns that are particular to Buddhism. Is suffering a mere perceptual delusion or it is predetermined by karmic conditioning? How exactly does the enlightened essence exists in the unenlightened individual, and how it can be encouraged to present itself? Do innate enlightenment, or "Buddha-nature," teachings contradict the Buddhist no-self teaching? Is

the subitist's positive language simply an expedient rhetorical strategy aimed at those intolerant of the apparently nihilistic edge to emptiness teachings? What different does any of this make?

Although the number of Indian Buddhists devoted to the Buddha-nature doctrine was relatively small, these teachings took on great importance in Central and East Asian Buddhism. While most generally the controversy represents a Buddhist dichotomy between spiritual cultivation as either intuitive or effortful, it seems clear that the sudden-gradual dichotomy is not black and white; as Luis Gomez explains, it is rather "a very general, sometimes vague, intuition of a tension or polarity between two approaches to knowledge and action."[250] Still, the sudden-gradual conflict covered a network of epistemological, ethical, and ontological issues that were integral to the workings of Buddhist thought, practice, and teaching. In this chapter, by examining how causation is expressed in the context of human growth, I will also address the role of embryology in this contested debate.

I. a. Competing models of growth: the force of karma

How it is that karma worked, and how exactly karmic causality could be effective from one lifetime to the next, is an issue that has been debated since the beginning of Buddhism. Buddhist texts as far back as the *Saṃyuttanikāya* feature philosophical dialogues between the Buddha and his students on the topics of causality in the context of rebirth—

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[250] Luis Gomez, "Purifying Gold: The Metaphor of Effort and Intuition in Buddhist Thought and Practice," in *Sudden and Gradual: Approaches to Enlightenment in Chinese Thought*, ed. Peter Gregory (Honolulu: University Press of Hawaii, 1987), 131.

this topic has been well summarized by Dasgupta, McDermott and others.[251] Karmic causality is an integral part of both Āyurvedic and Buddhist Indian sources on rebirth, and all Tibetan authors who write on embryology—whether affiliated with medical *or* religious traditions—acknowledge the role of karma in human conception and development. For some writers, the role of karma is quite significant, but for others, the role of karma is played down in favor of other factors influencing conception and embryonic development. In the following pages I will address karma's role in embryology on two levels: one, in the larger context of the Buddhist law of interdependent origination (*rten cing 'brel bar 'byung ba*; Skt. *pratītyasamutpāda*), and two, in the context of the specific causes of conception and fetal growth.

I. a. i. The law of interdependent origination

One of the most fundamental teachings of Buddhism, the law of interdependent origination is described in the third chapter of the *Abhidharma* following a presentation of Buddhist cosmology. It is a doctrine that explains the ultimately interdependent nature of all phenomena in the world, a notion that is the basis of the Buddhist thesis that all phenomena are impermanent, arising through causes and conditions, and therefore creators of suffering. The doctrine of interdependent origination is in part an abstract system of causality that applies to all phenomena (except nirvana and space). It is interpreted variously by all schools of Buddhism and is arguably the philosophical helm of Buddhist thought. The Vaibhāṣika,

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[251] See summaries in Dasgupta, *History of Indian Philosophy*; James McDermott, *Development in the Early Buddhist Concept of Kamma/Karma* (New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd., 1984); McDermott, "Karma and Rebirth in Early Buddhism."

for example, using the theory to refute early Indian philosophies that posited a permanent original creator, explained that, according to interdependent origination, there could be no genesis without cause. Later formulations, such as that of the Mādhyamika, used the twelve links of interdependent origination to go beyond a theory of causality to justify their position that because all phenomena are interdependent, they must therefore be intrinsically selfless or empty.[252] From this perspective, there *are* no things causally connected—ultimately there is only causal connection.

The specific expression of the doctrine of interdependent origination in the form of twelve linked stages is designed to explain causality in the case of living phenomena. Very briefly, the first of the twelve links, "ignorance," refers to a misconception of the true metaphysical status of all phenomena, including that of the human individual. The second link, "action," refers primarily to meritorious or non-meritorious acts committed in a previous lifetime. The nature of these actions are imprinted on the "consciousness," the third link, and their ethical quality determines one's type of rebirth. As a new being is conceived in a womb, the fourth link, the physical aggregates of "name and form," is created as the body of the embryo. The fifth link, "sources," are the developing individual's six sense powers (the eye, ear, nose, tongue, body and mental powers). "Contact," the sixth link, arises when the sense powers, the objects of the sense powers, and the consciousness join together in the

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[252] The twelve links are explained clearly in Jeffrey Hopkins, *Meditation on Emptiness* (London: Wisdom Publications, 1983), 275-283. The doctrine of interdependent origination is also represented iconographically by the "wheel of life" (*srid pa'i 'khor lo*). See, for example, Geshe Sopa, "The Tibetan Wheel of Life: Iconography and Doxography," *The Journal of the International Association of Buddhist Studies* 7, no. 1 (1984). See also David M. Williams, "The Translation and Interpretation of the Twelve Terms in the Paticcasamuppada," *Numen* 21 (1974).

effort to classify external objects as pleasant, unpleasant, or neutral, and "feeling," the seventh link, is consequently defined as the feelings of pleasantness, unpleasantness, or neutrality toward that contact. These feelings serve as the basis of "attachment" to objects deemed pleasurable, the eighth link; the ninth link, "grasping," is a more intense experience of attachment. Due to attachment and grasping, "existence"—that is, existence as a newly conceived individual—occurs, followed by "birth" and inevitably "aging and death." A single cycle of twelve links thus follows an individual through three lifetimes.[253]

The doctrine of interdependent origination served as a mediating concept, a "middle way," between the two extremes of eternalism, in which one believes that the individual, or an essential portion of the individual, continues unchangingly throughout a series of lifetimes, and nihilism, in which one believes that an individual is completely annihilated at death. The doctrine of interdependent origination allowed Buddhists to speak of a causal chain connecting deeds and their effects, without asserting a permanent transmigrating entity. It allowed a connection to be drawn between rebirth and the morally loaded Buddhist notion of ignorance. Significantly, it also means that the cause of ultimate liberation is the cessation of rebirth and the mechanics of karma. This places embryology—

The 12 links of interdependent origination:

1. ignorance (*ma rig pa*, Skt. *avidyā*)
2. action (*'du byed kyi las*, Skt. *saṃskārakarma*)
3. consciousness (*rnam shes*, Skt. *vijñāna*)
4. name and form (*ming gzugs*, Skt. *nāmarūpa*)
5. six sources (*skye mched drug*, Skt. *ṣhadāyatana*)
6. contact (*reg pa*, Skt. *sparsha*)
7. feeling (*tshor ba*, Skt. *vedanā*)
8. attachment (*sred pa*, Skt. *tṛshṇa*)
9. grasping (*len pa*, Skt. *upādāna*)
10. existence (*srid pa*, Skt. *bhava*)
11. birth (*skye ba*, Skt. *jāti*)

[253] This explanation is treated more expansively in Hopkins, *Meditation on Emptiness*, 275-283.

where the mechanics of rebirth is taught—at the center of Buddhist soteriology.

While all religious and medical Tibetan embryological narratives are complicit in the doctrine of interdependent origination, some Tibetan authors contextualize their discussion of embryology more explicitly within a discussion of interdependent origination. Embryogeny is situated by Longchenpa, for example, within a cosmogonic process that is sparked into operation by metaphysical ignorance at a cosmic level, an act referred to as the Ground's "straying" (*'khrul ba*).[254] The consciousness that manifests in cyclic existence through that process then begins the cycle of rebirth into various forms of existence as determined by individual beings' karmic actions. In this way, the cycle of rebirth is inextricably linked to the ethical quality of action, whether actions are virtuous, non-virtuous, or neutral determining how the process develops. Longchenpa uses the twelve links to narrate the process of individual human conception and development. After death, the intermediate state being is said to be drawn toward the next life due to a misunderstanding of the self-originating nature of *bardo* visions. A particular being's karmic conditions lead it toward rebirth, and as the embryo develops, the fourth link, "name and form," is manifested. The sense organs develop and sensations are experienced. The individual begins to grasp at objects and is reborn, giving rise to old age and inevitable death.[255] Longchenpa's narrative is significantly more complex than this, however, and we will see in the pages to come that while he does acknowledge the general influence of karma in the perpetuation of cyclic

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[254] Klong chen pa, *Tshig don mdzod*, 188 onwards.
[255] Ibid., 192-195.

existence, other factors play a crucial role in human development as well.

I. a. ii. The power of karma in the context of conception and development

Embryological accounts also address the problem of karma in the context of explaining the causes of conception and fetal development. All sources agree that conception is caused by three main factors: the joining of the two healthy reproductive substances of a man and a woman in intercourse and the consciousness of the transmigrating sentient being, which is generally said to be propelled toward the copulating man and woman by its own karma and afflictive emotions. Most (but not all) sources comment that this combination is then nurtured by the presence of the natural elements. This basic model of conception arrived in Tibet in the eleventh century with Vāgbhaṭa's medical text, the *Eight Branches,* which was widely influential in the subsequent development of Tibetan medical literature. This is the model present as well in the Buddhist sūtra, *Entry into the Womb,* the most widely cited source for Tibetan embryology, and it can be seen in the earliest of Buddhist texts, such as the *Majjhima Nikāya* and the *Abhidharma,* as well.[256] There is little disagreement among Tibetan Buddhist religious or medical writers on these key features of conception. Although we will see that in other aspects of gestation the issue of causality is more problematic, to this degree and in this context, karma is important to all. Over the next few pages we will see, however, that while the larger metaphysical connections between rebirth and karma that are

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[256] Guenther states, "This conception is as old as *Majjhimanikāya,* II, 156, where it is stated that fecundation takes place only when the Gandharva, the organizing principle in the state between death and reincarnation, is present at the time of the fertile period of the mother and father." *Jewel Ornament,* 73 ff. 43. Also see McDermott, "Karma and Rebirth in Early Buddhism," 169.

described by the law of interdependent origination are traditionally Buddhist, when we take note of the details of embryological narratives, the role played by karma in the processes of conception and growth may be more closely linked to Indian medical traditions.

In the earliest extant medical examples of Tibetan embryology, such as the *Four Tantras* and its twelfth-century commentaries, the discussion of the causes of conception introduces the main factors required for conception (the healthy reproductive fluids, the consciousness driven by karma, and the natural elements), in a model that is followed by commentators in later centuries. In Kyempa Tsewang's fifteenth-century commentary on the *Four Tantras*, the topic of embryology is divided into three main themes: the causes of the body's formation, the conditions of its growth, and the signs of birth. In this and other *Four Tantras* commentaries, the cause of embryonic formation—that is, conception—is a significant, heavily commented-upon topic. All the factors necessary for conception are described in the context of this topic. The factors required are typically listed as non-defective male reproductive substance (*khu ba*), non-defective female reproductive "blood" (*khrag*), a transmigrating consciousness (*rnam shes*) that is drawn toward the man and woman in sexual union, and the five elements (*'byung ba*). Menstruation is also addressed in this context, explaining when a woman can conceive. Following the *Four Tantras* primarily, of course, Kyempa Tsewang also cites the *Entry into the Womb* sūtra as authoritative in this section, as well as the *Eight Branches*, the *Kālacakra*, and other texts.

According to these traditions, if these necessary factors are defective or not present, conception will not take place. Humoral imbalances in either the female reproductive blood

or male reproductive substance will make them unsuitable to cause normal development, resulting either in unsuccessful conception or in development of a fetus that is severely physically deformed, as noted in chapter three. If the reproductive substances are not defective but there is no karmic connection between the transmigrating consciousness and the potential parents, it is said that there will be nothing to draw the consciousness to those parents—thus in this case also, conception will not occur. Early Buddhist scriptures—sūtra and *Jātaka*—are cited as evidence for this view. Kyempa Tsewang explains that the presence of each of the five natural elements is also required for successful conception, as stated in the *Entry into the Womb* sūtra.[257] The elements provide the material and energetic opportunity for development: the substance of the body is composed by the earth element, its fluidity and flexibility by the water element, its maturation by the fire element, its growth by the wind element, and the space in which it grows is provided by the space element. Each of these conditions must be in place for embryonic development to occur. The developing embryo is thus bound by the same laws of natural physics, as it were, as every other impermanent phenomenon in the natural world. Other requirements for successful conception include the woman's being of an age to menstruate and her being at the proper stage in her menstrual cycle. As the *Four Tantras* states, when the "womb is open" (*mngal kha bye*), conception can occur. The womb is said to be open for up to twelve days per month—during the first three of these days, menstrual blood is collected in the womb and conception can occur there up to the eleventh day. After this time the "old blood" is eliminated, Kyempa Tsewang explains,

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[257] Skyem pa tshe dbang, *Rgyud bzhi'i 'grel pa*, 125.

and the womb "closes."[258]

In the sixteenth century, nearly a hundred years later, Lodro Gyalpo's *Transmission of the Elders* again addresses the causes of conception and the manner in which the embryo is formed. Lodro Gyalpo condemns scholars who only make passing note of how conception occurs, stating that simple explanations do not adequately explain how the consciousness enters the womb or how precisely the body is established.[259] He explains that one should explain conception fully as the simultaneous occurrence of the following factors: one, the healthy wind, bile, and phlegm humors that are present in the father's and mother's reproductive fluids; two, the transmigrating consciousness that is impelled toward human rebirth by karma and the afflictions; and three, the very subtle forms of the five elements that exist within the semen, blood, and consciousness. Only with these causes in place, if the healthy man and woman copulate, will a transmigrating consciousness be able to enter the womb.

Whereas the commentary on the *Four Tantras'* verses on how conception occurs in these medical narratives draws primarily upon Vāgbhaṭa's medical text and Buddhist sūtra, when we move to the next main commentarial topic, addressing how conception is experienced, the religious tantras begin to play an important role as well. While the Indic medical texts and exoteric scriptures are used to support an emphasis on *karma's* role in conception, the tantras are used to authorize the causal significance of the *winds* to the event.

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[258] Ibid., 128.

[259] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 105. He specifies three types of causes: tangible or identifiable causes, conditions unfavorable for causing conception, and special causes (*rgyu ngos bzung*, *rgyu'i 'gal rkyen*, and *rgyu'i khyad par*). Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 103.

(Paradoxically, however, we will see later in this chapter that, in fact, it is sūtric narratives that champion the role of the winds in fetal development.) Lodro Gyalpo begins the discussion by citing the Guhyasamāja's *Vajra Garland.* He explains that the *Vajra Garland* asserts that the transmigrating consciousness, driven by karmic predispositions and afflictions, is caused by the winds to observe a man and woman in copulation, whereupon karma impels the consciousness into the womb. At the time the consciousness melts into the semen and blood mixture, it experiences a moment of senselessness, as if intoxicated.[260] Lodro Gyalpo cites a corroborating tantric account by Rangchung Dorje, emphasizing the role of the winds as well as the karmic predispositions in bringing the transmigrating mind into the womb, noting likewise that the mind enters the womb in an "unconscious" state. The mind is said to feel as if it is being blown by wind and rainstorms and therefore needs to take shelter in the womb.[261] Lodro Gyalpo cites here an alternative interpretation as well, one we have seen from sūtra, in which the transmigrating being enters the semen-blood mixture and immediately reacts to one or the other substance in a way that instantaneously determines its gender—attracted to the mother's substance, it becomes male; attracted to the father's substance, it becomes female (as I noted in chapter three, this *Abhidharma* account makes gender identification central to conception itself).

Karma is given responsibility for more than pushing the transmigrating consciousness toward the copulating man and woman. Citing the *Entry into the Womb* sūtra, Lodro Gyalpo

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[260] *rgyud rdo rje 'phreng ba,* the *bshad rgyud* of the *Guhyasamāja.* Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung,* 116.
[261] Ibid., 117.

explains that the transmigrating being must possess virtuous karma of an adequate level to be born as a human, and also that the karma of the transmigrating being and that of the parents must be equivalent in "type" or "class" (*rigs*) and level of meritorious distinction. In many texts, karma thus also plays an important role in what *type* of rebirth one obtains. Lodro Gyalpo summarizes a tradition present in the *Entry into the Womb* sūtra, also maintained by Gampopa, that transmigrating beings entering the womb are of two types, one that possesses some degree of merit, and one that possesses less merit. Gampopa's narrative explains that all intermediate state beings possess miraculous abilities, such as walking on air and seeing with divine eyes, but eventually the strength of their karma causes them to have frightening visions, such as that of a storm, heavy rain, a darkening sky, or the roar of a crowd of people. Then they envision entering a place, such as the second story of a house, a throne, a thatched hut, a leaf house, a shelter of grass, a jungle, or a rocky crevasse. Those with exceptional merit will see palaces or mansions, while those with low merit will be directed toward rocky crevasses. Arriving at their envisioned destination, they are immediately attracted to either the father's or the mother's reproductive essence. Colored by this emotional reaction, the consciousness enters into the mixture of the reproductive essences, whereupon conception has occurred.[262]

Lodro Gyalpo explains that, according to sūtra, while ordinary beings experience a loss of awareness upon entry into the womb, the classes of beings with higher levels of

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[262] *Jewel Ornament*, 63-64; Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 106-107 and 116-117.

spiritual realization have different experiences.[263] Universal monarchs (*'khor los sgyur ba*, Skt. *cakravartin*) and stream-enterers (*rgyun du zhugs pa*, Skt. *shrotāpanna*) are aware of their entry into the womb, but then lose awareness for the duration of gestation. First-level bodhisattvas (*byang chub sems dba' las dang po*) and solitary realizers (*rang sangs rgyas*, Skt. *pratyekabuddha*) also are "unconscious" during gestation, but they are aware of entering the womb and leaving the womb at birth. Higher level bodhisattvas are aware of the entire process.[264] In chapter three I described how Tibetans used embryological narratives to express Buddhist taxonomies of embodiment—here again we see them utilized to teach about the organization of bodies by their moral status.

I. a. iii. The shaky foundations of karma's role in becoming human

Following models inherited from Indian texts, for most if not all Tibetan authors karma played a critical role in causing rebirth and in directing the type of rebirth one takes. Despite the ubiquitous presence of karma as a force of conception and growth in these accounts of creation, however, we have seen that some medical commentators use tantric texts as authorities for attributing a causal role to the winds in conception. Some of these same accounts admit, furthermore, that the effects of karma can be over-written by ritual intervention or medicinal application. In some contexts, therefore, one's karmic destiny could be overcome by human intervention. Medicinal or ritual intervention was said to be able to affect the health of one's reproductive fluids, for example. For conception to occur

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[263] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 106-107 and 116-117.
[264] Ibid., 119-120.

successfully, male and female reproductive fluids must not possess humoral disorders, and Lodro Gyalpo notes that these defects can be caused by karma. Rejecting the suggestion of other scholars that one cannot make assertions about the humoral health of the semen and blood because this cannot be seen, he counters that with clinical experience one can observe the many signs of texture, color, and taste that are adequate indications of humoral balance of these substances. When the semen or blood is defective, conception will not be possible, and yet some types of defects can be treated medicinally. For such defects, Lodro Gyalpo simply refers the reader to the texts of Vāgbhaṭa and his commentators in which appropriate treatments are described. He notes that these texts also provide rituals that men and women can do themselves to promote healthy qualities in their own reproductive substances.[265]

More dramatically, these narratives claim that the very sex identification of the fetus could be changed medico-ritually. As explained in chapter three, the issue of how to guarantee the birth of a male child is of great importance in medical embryologies, although this is a matter ignored by the embryologies found in religious texts. The rituals described in the *Four Tantras* and its commentaries, as derived from Vāgbhaṭa's *Eight Branches*, are alchemically and astrologically-oriented and do not involve direct propitiation of deities.[266] Such rituals are not described in the *Entry into the Womb* sūtra, where the issue of sex

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[265] Ibid., 104.

[266] Vāgbhaṭa's *Eight Branches* does describe other rituals to ensure the birth of a male child that involve propitiation of Hindu deities, to be performed prior to conception, but these were not replicated in the *Four Tantras*, perhaps not surprisingly given their Hindu orientation. See *Vāgbhaṭa's Aṣṭāṅga Hṛdayam Śutrasthāna*, (Varanasi: Krishnadas Academy, 1996), 365-366. More research would be required to discover where in the Tibetan Buddhist corpus there might be rituals for changing fetal sex that involve propitiation of deities; I would assume that there are such rituals, although I have not seen them.

transformation is not mentioned. The *Four Tantras* and its commentaries state that these rituals should be performed during the third week of gestation, and they summarize various methods for ensuring the development of a male child. Expanding on the *Four Tantras'* verse that outlines this and other practices, Kyempa Tsewang explains, for example, that according to the *Eight Branches'* auto-commentary, the following ritual could be performed to ensure development of a male child:

> On the auspicious day when the victory star and the moon appear, using various types of iron a blacksmith should sculpt the form of a male child with its sense-organs complete. The soft [substance] should be kneaded three, five, or seven [times], and then it should burned in a coal fire until it becomes red. It should be dropped into the milk of [a lactating animal] with a male offspring, measuring [the milk according to] how many [types of iron were used]. Two handfuls of the liquid should be given [to the mother].[267]

Kyempa Tsewang argues that although generally the sex of the fetus depends on its karmic inheritance, because additional factors do play a role in development, rituals should still be performed. He also offers medicinal preparations that he claims to be a more powerful method for sex transformation, and he suggests an additional ritual in which a statue is entwined in a protection cord made from the wool of a sheep with male offspring and then wrapped around the pregnant woman's waist.[268]

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[267] Skyem pa tshe dbang, *Rgyud bzhi'i 'grel pa*, 132. These rituals are also describe by Lodro Gyalpo at Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 127-128.

[268] He cites an explication of a medicinal formulation described in the *Four Tantras* from the *'bum nag*, a *Four Tantras* commentary by the student of Yuthok Yonten Gonpo, Yeshe Zung. This text states, "Take equal parts of the essence (*dwangs ma*) of the sun, which is sea buckthorn (*star bu*), and the essence of the moon, which is a grape, and an amount of molasses that is equal to both of those two, and eat it." He also provides extensive

Clearly, although karma is accepted as a primary cause of rebirth and cited by many as the determinant of body type, there is nonetheless a conflict between the apparent pre-determinism of the karmic model of causality, on the one hand, and the need for medical systems to assume that intervention can be efficacious, on the other. Medical interventions are in fact regularly cited as strategies that have the power to override the effects of karma, even in the matter of forming the human body.

II. Attributing causality to winds

The firm foundations of karma's pre-deterministic role in rebirth is shaken by more than this, however. Beyond the moment of conception, there are numerous disagreements over the relative importance of karma and other factors, such as the winds, during gestation. By the time of the second diffusion Tibetans had available to them two Indian textual models for the causal function of the winds in embryology. The Indian medical model, on the one hand, ignores the role of the winds in favor of karma, even during the process of gestation. On the other hand, the Buddhist canonical model, as revealed in sūtras and tantras, emphasizes the causal function of the winds over that of karma. [269] These narratives offer intricate schemes for attributing growth during gestation to a host of variously named

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commentary on the use of the sea buckthorn and the grape from an unidentified commentary on the *bdud rtsi bam po brgyad pa* by Vimalamitra. Skyem pa tshe dbang, *Rgyud bzhi'i 'grel pa*, 133-134. The Tibetan doctor, Jampa, living in Darjeeling in 2000, states that Kyempa Tsewang is explaining how one may use substitutes such as these for the originally intended ritual substances, namely, a woman's first menstrual blood and a man's first seminal emission (personal communication, 2000). I do not know anything about the history of this ritual, although Indic tantric ritual texts would surely provide more evidence.

[269] The origins of this notion may be quite old. Zysk notes that the *Atharvaveda* contains a verse attributing the winds with the force that causes birth; the verse states, "A human being breathes out (*àpānati*) and breathes in (*prāṇati*) when inside the womb (*gàrbhe*). When you, O *Prāṇa*, urge him on he is born again." Zysk, "The Science of Respiration and the Doctrine of the Bodily Winds in Ancient India," 201.

winds.

In Tibetan medical and religious embryological narratives alike, Buddhist sūtras are often referred to as authorities on the process of transmigration, the nature of the transmigrating entity, the workings of karma and the four elements, the relationship between the mind and the body, and other topics relevant to human growth. The primary source for sūtric embryology, the Mahāyāna sūtra, *Entry into the Womb,* makes note of independently named winds that are responsible for fetal growth during each week of gestation. These details are extensively cited by many Tibetan authors who write about embryology in both medical and religious traditions. In the early twelfth century, Gampopa utilized such details from this sūtra in his *Jewel Ornament of Liberation,* crediting the sūtras specifically. This sūtra is arguably the main source on embryology, aside from the *Four Tantras,* for three major Tibetan medical commentaries on the *Four Tantras*—the commentaries by Kyempa Tsewang, in the late fifteenth century, Zurkhar Lodro Gyalpo, in the mid-sixteenth century, and Desi Sangye Gyatso, in the mid-seventeenth century. Citing the *Entry into the Womb* repeatedly, Lodro Gyalpo notes that it is very important in embryology to get the names of the weekly winds correct, and that this is an issue about which other scholars are often mistaken. The names and functions of the winds, as taken from the Buddhist sūtra, are the most prominent and consistent details these medical commentators add to their accounts of the body's weekly development.

Another strain of embryology in which specific causal forces for embryonic development—that is, forces other than karma—occur is that of the tantras. Here there are

various traditions. Some narratives link each of the five primary winds (the life-sustaining, downward-clearing, fire-accompanying, upward-upholding, and all-pervasive winds) and five branch winds (the serpent, tortoise, chameleon, Devadatta, and bow-victor winds) of tantric physiology, mentioned in chapter three, to each of ten months in the womb. Others simply note the general role of the five primary winds throughout the growth process. Still others attribute embryogenic causality to each of the four elements, one of which is wind. Surprisingly, however, given the overall importance of winds in tantric contemplative practices, even in the earliest Tibetan embryologies oriented toward tantric, rather than sūtric, teachings, the winds in general play a less important role.[270] Neither the early *Great Jeweled Wishing Tree* by Drapa Gyaltsen nor the early Nyingma Heart Essence text, *Union of the Sun and the Moon,* mention the role of the winds in their embryologies.[271] While tantric narratives do discuss the causal relationship between the winds and the general *stages* of fetal growth, it seems to be primarily a sūtric tradition in which separate winds are enumerated for each *week* of development.

As is the case in the Buddhist sūtras, and to a lesser extent in the tantras, many important Tibetan religious and medical scholars felt that intermediary causal forces—that

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[270] An anomalous tradition of embryology that includes the winds is *King of the Moon,* said by most Tibetans to have been brought from China in 710 by Princess Kongjo. Sangye Gyatso claims that this text is Indian, having traveled to Tibet through China. The text details forty-three winds for forty-three weeks and their respective responsibilities in development, but no subsequent Tibetan text repeats any of these winds.

[271] *nyi zla kha sbyor,* as cited by Longchenpa in Klong chen pa, *Tshig don mdzod,* 199. Drapa Gyaltsen does mention the winds' role in forming the three channels in the embryo: "through the power of the wind entering [the central channel], the *rkyang ma* channel [is formed], and by its gradually emerging [from the central channel], the *ro ma* channel [is formed]." Beyond this statement, however, he does not attribute growth during stages of development to the winds, as in the sūtric model, or, even, as do the other tantric sources mentioned by the medical commentators. Grags pa rgyal mtshan, "Rgyud kyi mngon par rtogs pa rin po che'i ljon shing," 59.

is, forces other than karma—were essential to the growth of the body. Some early scholars in Tibet who wrote about embryology did not mention such intermediary forces at all, leaving karma as the sole causal force. In the *Eight Branches'* model of embryology it is karma alone that provides the impetus, at the time of conception, for the growth of the body, and over the course of fetal growth no other force, not even that of the winds, has any causal function. The *Four Tantras* is also largely silent on the role of the winds in the body's development. The earliest extent commentaries of the *Four Tantras'* embryology, three small medical texts likely authored by Yuthog's students, also do not mention the weekly winds.[272]

It is clear, therefore, that the winds played a larger role than karma in theories of the developing body that are based on Buddhist canonical materials, than in those closer to Indian medical models. There is an historical aspect to this as well: given the evidence available to us today, earlier narratives of embryology—say, those from the eleventh or twelfth centuries—are significantly less likely to attribute causality to the winds than are later embryological accounts, where doing so becomes almost ubiquitous, especially in the case of medical texts. What is interesting here, then, is the absorption of the Buddhist canonical model into the Tibetan medical commentaries. By the fifteenth century, medical texts focus heavily on the intermediary causal role of the winds during gestation. The *Entry into the*

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[272] The *Four Tantras'* chapter on embryology does not describe the names and effects of individual weekly winds, although it does state ambiguously that the wind element is active during thirty-eight weeks of gestation. It is grammatically unclear whether this verse refers to the activity of thirty-eight winds, or whether it simply refers to the general effect of wind on the thirty-eight weeks. The commentators that come most immediately after the *Four Tantras*—the commentaries in the *Eighteen Additional Practices* and Sumton Yeshe Zung's commentary—do not clarify the question of whether thirty-eight winds are indicated when they address this particular verse. It is not, as far as I have seen, until Kyempa Tsewang that the sūtric explanation of thirty-eight winds with individual names is used to comment on this *Four Tantras* statement. (I wonder even if this mention of the number thirty-eight could have been added in later editions of the *Four Tantras*.)

Womb sūtra is the central source for embryology for these medical commentators. In the matter of identifying causal forces responsible for the growth of the body, it seems that over time the Buddhist canonical model—emphasizing the causal influence of the winds—won out in Tibet over the early medical model, which left developmental causality up to karma.

III. The role of the natural elements in causing growth

For some authors, wind was not the only natural element that played a role in causing human growth. While most narratives state that the elemental energies are essential factors in the process of taking a new human life, Tibetan descriptions of the precise role of the elements in embryology are far from consistent. Some authors emphasize the essential role of all the elements, others ignore three or four elements in favor of the wind element alone, and yet others, such as Vāgbhaṭa, neglect to mention the elements at all. The three earliest extant commentaries on the *Four Tantras*, the *'Bum nag* and the two commentarial texts of the *Eighteen Additional Practices*, likewise do not mention the role of the elements in embryonic development. Some authors, such as Gampopa, provide details on the activities of the wind element, but overlook the activities of other elements.[273] The *Entry into the Womb* and *Abiding in the Womb* sūtras do discuss the importance of the elements for conception, but they downplay the role of four out of five elements in the subsequent process of fetal growth.

In his *Transmission of the Elders*, Lodro Gyalpo is highly critical of those who

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[273] Gampopa's account of the causes of conception does not mention the role of the five elements at all, nor does it discuss defects in reproductive fluids or other causes that may result in inability to conceive.

question the need for all the elements in embryology (despite the absence of the elements in Vāgbhaṭa's *Eight Branches,* one of his primary medical sources).[274] Both the reproductive fluids of the parents and the transmigrating consciousness, he argues, are necessarily possessed of subtle forms of the five elements, and therefore it is logically impossible for conception to occur without the presence of all elements. The natural elements, he explains, refer not to static material elements but rather to qualitative, dynamic functions. For instance, the earth energy refers to the quality or function of hardness, and the water energy refers to the quality or function of cohesiveness, flexibility or coolness. The elements are thus the very functional interactivity that make change and growth possible. Acknowledging the *Eight Branches'* neglect of this matter, Lodro Gyalpo looks to another Indian source and notes that the *Entry into the Womb* sūtra does clearly state that each element is essential.[275] He explains,

> When the body itself is generated, the parents' semen and blood, the four great elements and the consciousness (*ngo bo*) become undifferentiated, because by the earth element solidity is made; by the water element liquidity is made; by the fire element heat is made; and by the wind element movement is made.[276]

Lodro Gyalpo defends the presence of the elements in the transmigrating consciousness especially, maintaining that consciousness and the five elements necessarily exist interdependently; as the *Mahāmūdra Quintessence Tantra* says, "These great elements should

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[274] Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung,* 107.
[275] Lodro Gyalpo also explains here why the *Entry into the Womb* mentions four elements, and the *Four Tantras* and other Tibetan sources describe have five. Ibid., 108.
[276] Ibid., 122.

be known as the support of life. Likewise, life is that which is supported [by] them."[277] How is it that we can confirm the existence of these very subtle elements if they cannot be seen? Lodro Gyalpo offers two slightly different scriptural explanations of how the presence of such imperceptibly subtle forms of the elements can be confirmed. First, the "Second Inquiry of the root tantra"[278] states that,

> Because the parents join together, from the predispositions of tangible hardness the earth [element] will be born. From the nature of the *bodhicitta* substance (*khu ba*), the water element occurs. From the exertion [of the parents], heat is generated. The movement is known well as the wind [element]. The bliss [of the parents] is the space element. By these five, the consciousness is encircled.[279]

Similar to this sexualized explanation, Lodro Gyalpo offers another, more psychological explanation from the thirteenth-century religious scholar, Rangjung Dorje:

> When two parents experience sexual intercourse the intermediate state *gandharva* comes near, whereupon the predisposition of touch is experienced as solidity itself, and the earth element is generated. Within the essence of the parents' reproductive substances (*khu ba*), the *bodhicitta*, by grasping at the thought, "That is mine," creates the condition for the emergence of the water element. From the exertion[of the parents], the fire element, which is heat, is produced, and it is also the nature of blood. Movement, which is well-known as wind, is also lightweight, and all movement is thus the nature of wind. The bliss [of the parents creates] the sky element, [which] opens up an opportunity [for things to exist], and

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[277] *phyag rgya chen po thig le'i rgyud*, cited in Ibid., 120-121.
[278] The doctor and religious scholar Dorje Dramdun could not identify this text, beyond stating that it is certainly not the *Four Tantras*. Personal communication, Sarnath, 2000.
[279] Cited in Zur mkhar pa blo gros rgyal po, *Mes po'i zhal lung*, 121.

because it is endowment itself, the consciousness is surrounded by the five elements.[280]

In these accounts there is a clear causal link between the elements and the manifestation of the embryonic form. Lodro Gyalpo asserts ultimately that taking hold in the womb is the role of the earth element, generating the embryonic form is the role of the water element, ripening the form is the role of the fire element, growing the form larger is the role of the wind element, and providing the opportunity for all of this is the role of the space element. The elements are held responsible for the development of the sense powers and other aspects of the body, and the six tastes are correlated to the elements as well.

Unlike the majority of Tibetan embryologists, who only discuss the functions of the elements at the time of conception, Lodro Gyalpo asserts that the five elements are responsible for generating various aspects of the body throughout the course of its development. Intrinsically part of the semen, blood, and mind that join in the womb at conception, he claims that the initially subtle elements grow stronger during gestation due to the power of the nutrients consumed by the mother.[281] As the embryonic body grows, supported by the mother's supply of nutrients, the strength of the elements increases. (As I noted earlier, the chain of effect between reproductive fluids, food, and growth exists in adult physiology too.)

Turning to another narrative, Longchenpa's description of embryonic development is dominated by the activities of all of the elements to a far greater degree than other Tibetan presentation of embryology. During the first two weeks of development he organizes

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[280] Cited in Ibid.
[281] Ibid., 120.

development into seven-day cycles according to the functions of the elements: during days one through four, each of the four elements is sequentially predominant; on days five and six they operate in pairs; and on the seventh day they function together as a group. This organizational principal is said to pertain to the entire period of gestation, although Longchenpa's account only provides details for the first two weeks. Longchenpa's account of the first week of development describes the four elements' activation of four very subtle channels in the embryo's body: named for the elements themselves, these are a water channel, an earth channel, a fire channel, and a wind channel. The space element operates on the seventh day to provide a place for the four elements to gather together. In the second week, the work of the elements continues as the embryo is dissolved, compacted, baked, and scattered about, dispersing "like fluffy clouds in the sky." On the eighth evening, by the power of karma and predispositions, these fragments are gathered by the water element. In the third and fourth weeks, the embryo is again sequentially destroyed and reconstituted, as new structures and energies of the subtle body are formed within the embryo.

In this quite unusual presentation of the role of the elements in embryology, Longchenpa also distinguishes between "conventional" (*kun rdzob*) and "ultimate" (*don dam*) elements. Through the male cause and female condition, the conventional elements become functional—these conventional elements are responsible for the development of physical features during gestation. The activity of the conventional elements thus generates the body's blood, flesh, breath, as well as many of the mental abilities of cognition, perception, and awareness. Through the mind and wind, which are contributions of the transmigrating

being, the ultimate elements become functional—they allow the intermediate state consciousness to take hold of that new body, and they initiate the maturing dynamic energies of differentiation and assimilation that causes embryonic development. The ultimate elements thus generate the eyes, four wheels, and three channels of the embryo. With the parents' reproductive substances causing physical development and the consciousness' contribution causing the organizational impulse for development, the role of the natural elements is discussed in a unique and much more subtle and detailed way in the Great Perfection than by any other tradition. [282] Again, we see how a central Great Perfection doctrine is made prominent in the narrative of embryology. David Germano explains the central importance of the elements to this tradition, and their relationship to the Great Perfection articulation of soteriology. "In the Great Perfection tradition," he writes,

> these five elements are understood as the congealed solidification of the pure light intensities referred to as the five lights, a materialization which takes place by virtue of our failure to recognize the lights as self-presencing, and our consequent straying into the alienation of cyclic existence.[283]

The significance of the natural elements here, then, goes far beyond their role as the building blocks of material reality. In the case of the Great Perfection, the emphasis on the activities of the natural elements during gestation is justified by the tradition's overall philosophical and soteriological system.

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[282] Klong chen pa, *Tshig don mdzod*, 200-208. For numerous insightful comments on the role of the elements in Longchenpa's work, see Germano, *Notes to the translation of Longchenpa's Treasury of Words and Meanings.*
[283] David Germano, *Mini-Encyclopedia of Great Perfection Terminology* (Charlottesville, VA: undated manuscript), entry on "elements or elemental energies".

IV. Growth caused by the power of gnosis

Up to this point I have argued that, as in the Buddhist sūtras and tantras, many important Tibetan religious and medical scholars felt that causal forces other than karma were essential to the growth of the human body. Those other forces—the winds alone, or all of the natural elements—were themselves integral components of the newly developing, ordinary body of the fetus. In these models, the various features of the growing body themselves thus served to cause further development, in a gradually accumulative way. Notably, however, these forces are impure, part of the world of saṃsāra. In this section I will turn to a fourth model of causation in human growth, one that differs quite radically from other presentations, and one in which change is motivated by an eminently pure phenomenon, the wisdom of a Buddha.

Longchenpa's Great Perfection narrative of embryology is unusual not only for its particular attention to the role played in growth by the natural elements; also remarkable is his discussion of the formation of the eyes in the embryo. In chapter four I outlined the theory of fetal development in which Longchenpa describes the formation of two tiny "eye-like" features, called the "eye of the lamps" (*sgron ma'i spyan*) and the "eye of the elements" (*'byung ba'i spyan*). Whereas in other Tibetan embryologies the eyes are said to appear only much later in gestation, in Longchenpa's account these eyes appear within the circulatory channels during the first week of gestation. The tiny "eye of the elements" directs the development of the physical body, and the "eye of the lamps" is given ultimate responsibility

for the subtle body, and therefore also for the visionary experiences felt during specific forms of Great Perfection contemplative practices. The designation of these forces as "eyes" and their placement in the very earliest stages of human development is dictated by the importance of vision in Lonchenpa's contemplative system, as discussed in chapter four. In this context it is notable that, by attributing the force of causality in embryonic growth to these "eyes," which are explicitly correlated to innate wisdom (*ye shes*), Longchenpa has effectively given *the Buddha's wisdom* the power to cause human growth. In this model, a purified form of *knowing* is explicitly the operative causal agent of human existence. Contrasting this model with the earlier model valuing the role of karma, here we see, among other things, a primacy of epistemology over ethics—in other words, a valorization of cognitive over moral transformation.

Indeed, pointing to the systematic Buddhist contrast between karma (*las*) and innate wisdom or "gnosis" (*ye shes*), David Germano characterizes the Great Perfection as a "gnostic reinterpretation of Indian Buddhism."[284] He explains his use of the term gnostic:

> "gnostic" in this context refer[s] to Buddhist scriptural traditions presenting a Buddha's gnosis as *the* critical and preexistent agency in the primordial generation of a world, cosmos, individual body, and individual subjectivity. This contrasts with—and complements—a Buddhist tendency to begin with the problem of impure cyclical existence (Skt. *saṃsāra*) and human action (Skt. *karma*), and thus view the Buddha as a type of telos arrived at only by a

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[284] David Germano, "Pure Lands and Creative Buddhas in Renaissance Tibet," in *Mysticism and Rhetoric in the Great Perfection (rDzogs chen)* (University of Virginia: unpublished manuscript, 3/22/02 printing), 1.

long and arduous contemplative path.[285]

Germano argues that in Longchenpa's work all phenomena—at both the universal, cosmogonic level and the individual, embryonic level—originate with the movement of innate wisdom or gnosis, and that karmic processes are relegated to a position of secondary importance. Thus the wisdom of a Buddha—not karma—is the primary causal dynamic operative in Great Perfection notions of generation.

V. The forces of creation

In chapter three I presented embryological narratives as a means for Tibetan authors to define human bodies, and to say something about what it is (or what it should be) to be human. In addition to deciding what counts as a body, embryology divides bodies into a range of body types. The typology of bodies is done according to some underlying organizational principle; in our society, for example, bodies are sorted by explicitly racist or sexist schemas. Indeed, the problem of how bodies are differentiated is one that all religions try to solve. Why are some born healthy, some beautiful, some ugly, some into poverty and distress? Why does illness and misfortune strike some and not others, why does it strike when it does?

An answer is provided in Buddhism by the concept of karma, which rationalizes and moralizes that which otherwise would seem random, instructing humans to cherish their human embodiment as a precious opportunity to generate good karma and obtain a better rebirth. It is also karmic merit or demerit, however, that ultimately keeps one locked in the

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[285] Ibid., 3.

perpetual cycle of rebirths until ultimate salvation. In early Indian Buddhism one's karmic destiny was largely only a matter of one's own concern—that is to say, one's karmic effects were carried solely within one's own lineage of rebirths, and did not affect to a significant extent the rebirth paths of others. With the Mahāyāna bodhisattva ideal, the notion of karmic destiny was expanded beyond one's own line of lifetimes: the bodhisattva was to generate a karmic force powerful enough to liberate all beings from their own karmic destinies. In Vajrayāna Buddhism, the emphasis on ritual action came to be seen as an essential intervention, as many traditions relied on the power of the divine—whether embodied within oneself or called upon as an external force—on the path to enlightenment.

In this chapter we have seen that for Tibetan authors, karmic causality was far from the only pattern of thinking about the causation of the human individual. I began by explaining that karma as articulated in embryological narratives—both in its involvement with the Buddhist law of interdependent origination, and in its specific role as a causal agent in conception and human growth—was held by some early Tibetan embryologists to be the sole causal agent in human rebirth and development. Karma was an integral part of the law of interdependent origination, propelling the transmigrating being along the path toward physical embodiment and defining the nature of that embodiment. Karma was also responsible for the type of body a transmigrating being could obtain: transmigrators carrying superior moral achievements could obtain psycho-physiologically and soteriologically superior bodies.

I also demonstrated that a karmic theory of causality was not enough for all

embryologists, and that for some authors other characters, such as winds, natural elements, or one's Buddha-nature, were the dominant causal contributors to the formation of the new human being. Indeed, as I suggested in chapter four, medieval Tibetans seemed little constrained by the authorities of scripture or empiricism, apparently free to write the details of embryonic growth as they liked. Tibetan embryology germinated the individual human body with a scholar's own specialized narrative about causation and growth. Embryological narratives defined certain acceptable paradigms for change and growth. Change and growth happen in stages, as with Drapa Gyaltsen and other texts that outline the religious path structure. They are characterized by suffering, as for Gampopa. They are completely integrated with both the emotions and the workings of the natural elements, as with Longchenpa, and in his tradition they are ultimately driven by an enlightened form of knowing. In some narratives, change and growth are innately present as potentials within the fetus; in other narratives, they require the successful workings of an intricately coordinated complex of sequentially generated causal forces. These narratives thus imbue religious doctrines with specific, personified models of temporality.

Disputes about the significance of karma and rebirth are nothing new in Buddhism, and several good volumes of secondary scholarship have addressed the varied ways karma has been interpreted throughout the history of Indian and Tibetan thought.[286] In this chapter my claim is not that these embryological debates add much of sophistication to Buddhist

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[286] See, for example, Wendy Doniger O'Flaherty, ed., *Karma and Rebirth in Classical Indian Traditions* (Delhi: Motilal Barnarsidass, 1983). Ronald W. Neufeldt, ed., *Karma and Rebirth: Post Classical Developments*, ed. Robert C. Neville, SUNY Series in Religious Studies (Albany: State University of New York Press, 1986).

arguments over causality or the sudden-gradual problem. Rather, a more interesting conclusion at this point is that the *existence* of these controversies, and the ways in which they are played out, in medieval Tibetan embryology—a subject of significance that spans the disciplinary boundaries of religion and medicine—has additional historical and methodological implications.

Despite the availability of Indian Buddhist models, such as that of the *Entry into the Womb* sūtra, that marginalized the role of karma in human growth in favor of other causal factors, we have seen that many early Tibetan narratives, such as that of the *Four Tantras* and its earliest commentaries, attributed dominant causal responsibility for embodiment to the force of karma. Tracing the dialogue between religious and medical writers on these topics for the next several centuries, however, we begin to see that by the fifteenth century, the influence of Buddhist theories that downplayed the role of karma won out in Tibetan religious and medical literature. By that time, medical texts focused heavily on the causal role of the winds during gestation, and Buddhist sūtras were the central source for embryology, even for medical commentators. As Tibetan intellectual sectarianism became more prominently pronounced in the thirteenth-fourteenth centuries, the Indian medical model of causality in which karma is the dominant force (a model adopted by the *Four Tantras* as well) was thus overshadowed by a collection of alternative views. Tibetans increasingly relied on Buddhist sources that emphasized the possibility of *intervening* in the dictates of karma, and the causal role of other forces in causation or growth, such as the winds and the natural elements. In medical texts, this shift may indicate an increasing acceptance of the authority

of the Buddhist metaphysics of the *Abhidharma*, the sūtras, and the tantras, as the theoretical basis of aspects of Tibetan medicine. Paradoxically, however, this occurs even as medicine is increasingly defined as a "secular" tradition in the developing spirit of sectarianism and "disciplinarity" in Tibet.

How can we make sense of this situation? One possibility is to recognize that the nature of this problem has to do with where we are defining the boundaries of religion and medicine. As I mentioned in chapter one, although it is sometimes vaguely stated that medical theories are fully integrated with religious doctrines in Tibet, the two are still defined as distinct disciplines. It appears that while Tibetan historiography typically marks medicine as a "secular science," by the fifteenth century certain topics within medical literature, most notably embryology, anatomy, and physiology, had been largely absorbed into Buddhist conceptual frameworks. As it turns out, what has become increasingly evident in the last two chapters is that it appears to be less the case that religious traditions borrowed embryology from medical traditions, as is generally assumed by Western scholars, than the reverse—that is, embryology is most fruitfully a *religious* topic. For religious writers, embryological narratives were a means of embedding doctrinal messages into human identities: such embryologies are religious doctrines that are narrativized into human lives. For medical writers by the fifteenth century, embryological narratives became a forum for religious theorizing—the topic allowed medical scholars the opportunity to theorize about issues of vital importance in Buddhist literature.

As Western scholars trying to interpret Tibetan intellectual culture, then, we must be

careful. The modern positivist or scientistic perspective, in which we might evaluate the truth of Tibetan embryology as primarily a part of Tibetan medicine, would lead us to think that the tradition is simply *wrong* about the details of conception and gestation. Indeed, still today, most Western writings on Indian and Tibetan embryology do just that—"how quaint," they say, are these incredibly complicated and sophisticated debates. When we read embryology in another way, say, as philosophical or religious narrative, however, we see that it effectively communicates religious or social taxonomies, moral or political reflections, and a variety of other cultural aims and positions.

In Zimmermann's insightful study of Indian medicine, *The Jungle and the Aroma of Meats*, concepts, vocabularies, and stereotyped formulas are found to be common to a variety of disciplines across ancient Hindu Indian literature. While Zimmerman's work suggests a valid approach to the study of Tibetan medical texts and their relationship to other forms of Tibetan literature, a reduction of embryological epistemology to formulaic repetition is, in the Tibetan case, largely inappropriate. Correspondences made between aspects of embryology and religious thought were deeply imagined by many Tibetan writers. This was not simply a superficial schematic repetition of structures or paradigms from earlier traditions, but rather, highly creative interpretative work, using embryology to discuss Buddhist philosophy. Tibetan embryology is linked to issues of fundamental importance in Buddhist thought and culture: to cosmology and astrology, to causality, salvation, ethics, and the complexities of Buddhist practice. What emerges in these Tibetan texts is a fundamental concern with the processes of generation and growth and notions of dynamic interactivity.

The interpretive approach Tibetans took with the inherited traditions of embryology demonstrates the significance of creativity to these writers. The appearance of this notion is notable, given the common presupposition in Western scholarship that Buddhist thought is overwhelmingly colored by a worldview that stresses "static" ideas such as no-self, emptiness, or impermanence, and ideas of historicity or change that focus on *preserving* tradition. Far from maintaining slavish adherence to Indic models of embryology, Tibetans challenged those models, adapting them creatively to meet their own needs. The polyphonic message expressed by the resulting narratives speaks of a paradoxical simultaneity of selflessness and self-identity. Embryology allows them to speak of existence as a unified past, present, and future that is defined by its material and potential environments.

Narrative theorist D. Ezzy, like Ricoeur, promotes the narrative form as particularly effective in the effort to integrate notions of identity and temporality. He writes that "the unity of the self, however transient and changing, is a temporal unity that locates past and future in the present, through the act of role-taking."[287] Buddhist embryological narratives impose upon the otherwise discordant present of the human identity a temporal unity of the past and future. These narratives "emplot" identity, suggesting an organizing theme for one's identity and its path of growth. At the same time, the heterological narratives of embryology record the narrative of the history of Buddhism in Tibet. As medieval Tibetan scholars sifted through inherited texts and theories, embryology fell clearly to the side of religion, eventually becoming a place for religious and medical theorists alike to contemplate metaphysical

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[287] Ezzy, "Theorizing Narrative Identity: Symbolic Interactionism and Hermeneutics."

questions of being and becoming, while topics such as pharmacology and nosology were left to shape the domain of "secular" medicine. Indeed, strange as it may sound to the modern ear, here it will serve us to note that the inclusion of the study of the body in the field of medicine at all—in the form of physiology, anatomy, or embryology for example—is a particular historical occurrence in our own intellectual history.[288]

[288] For a discussion of the study of anatomy in ancient Greek medicine and philosophy, for example, see Edelstein, *Ancient Medicine.*

Concluding Digressions

I began this work by suggesting that in Tibetan embryologies we can see many attributes of the narrative – a central subject, a well-marked beginning, middle, and end, a narrative voice, the suggestion of necessary connections between events – and that reading embryologies as narratives would reveal them to illuminate the richly colorful ways in which Tibetans constructed human identities by the creative act of authorship. I began by asking about the central subject: Who is the main character in an embryological narrative? What it is that embryological narratives in particular allowed Tibetan narrators to say about the body, about human identity, about what it means to be human? It has been my assertion that embryology is a discursive tool appropriated by Tibetans to articulate and promote acceptable models of identity, continuity, and change. We have seen Tibetan authors to wield this tool variously, and although the story of gestation was controversial, all were stories of transformation that situated the seeds of change in the origins of the human body. In the history of Euro-American philosophy, aesthetics is the intellectual discipline that focuses on articulating and analyzing problems that arise when contemplating aesthetic objects. In this study I addressed Tibetan embryological narratives as aesthetic objects. I also asked what attitudes Tibetan intellectuals themselves brought to their sources for embryology, proposing that they too considered their source materials as aesthetic objects, rather than as statements of scientific or empirically observable "fact." In the end, I suggested that embryology is most richly a religious topic: religious thinkers and, eventually, medical

writers too, embedded doctrinal messages into human identities using the discourse of embryology, narrativizing religious aspirations into human lives.

Throughout this work we have seen the thematic and structural comparison of embryological accounts point to both convergences and divergences between modes of discourse in Tibetan literature. Reversing Buddhist historiographical style, in this conluding section I will move from small to large—from considering the early development of the human individual to questioning the formation of the social institutions that produced those narratives. Having investigated the embryonic "historiography" of individual identity, I am now led, in this conclusion, to think about the historiography of social identity, for if embryology is a narrative that defines individual identity, history, surely, is the narrative that defines social or institutional identity. In the following pages, therefore, I will propose an expansion of this inquiry into the relationship between narrative and identity by briefly examining a few aspects of Tibetan historiography. Can we see any parallels between models of expressing human identity and models of expressing social identity? What are the organizing themes of medical histories in Tibet, and how are their characters described?

Like embryological narratives, which claim to record the personal history of the individual, histories of traditions or institutions are often recorded as stories—stories with characters who enact or are affected by events that are organized temporally and driven by a plot. Such stories are essentially tellable: they arrange events in a rhetorically purposeful

manner to express a point or teach a lesson.[289] In chapter one I wondered whether we might find similarities in compositional form between embryological and historical narratives. I cited Hayden White to claim that themes of authority are common in histories, as is the latent or manifest desire to moralize the events they address, and indeed we have seen these to be central issues in embryological narratives.[290] In this dissertation I have written about what embryology tells us about the relationship between medicine and religion in Tibet. This "history" of embryology, or, perhaps, this "cultural poetics" of embryology, has contributed to our understanding of the interactions between religious and medical literary culture during a period of several centuries in Tibet. In this concluding section I will lay the foundations for a comparison between two methods of historiography that *I* confront. I ask my readers now to consider, on the one hand, the impression we have gotten about medical literary culture and its interactions with religious literary culture in Tibet from examining the phenomena of embryology, and on the other hand, the way the history of medicine is presented by Tibetan medical historians themselves. How is the main character—the tradition of Tibetan medicine itself—portrayed in the historiography of medicine? What are the stories told in histories of medicine, and how are these stories narrated? What do these stories tell us about how medical traditions distinguished themselves from other systems of

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[289] Jahn, "Narratology," Section N4.3.

[290] White, "The Value of Narrativity," 14. For the context of this chapter also see Georg G. Iggers, *Historiography in the Twentieth Century, From Scientific Objectivity to the Postmodern Challenge* (Hanover: Wesleyan University Press, 1997); Frank Ankersmit and Hans Kellner, ed., *A New Philosophy of History* (Chicago: University of Chicago Press, 1995); Dominick LaCapra, *Rethinking Intellectual History: Texts, Contexts, Language* (Ithaca: Cornell University Press., 1983); Michael Aung Thwin, "Prophesies, Omens, and Dialogue: Tools of the Trade in Burmese Historiography," in *Moral Order and the Question of Change: Essays on Southeast Asian Thought*, ed. David K. Wyatt and Alexander Woodside (New Haven: Yale University Southeast Asian Studies, 1982).

thought and scholasticism in Tibet?

Zeff Bjerken's recent doctoral dissertation, *The Mirrorwork of Tibetan Religious Historians: A Comparison of Buddhist and Bon Historiography*, articulates key features of Tibetan historical narratives, which are typically highly stylized, "sharing tropes, categories, and techniques of emplotment."[291] Bjerken illuminates several rhetorical strategies adopted by Tibetan historians in their effort to express notions of moral authority and continuity, and in the following pages I will consider some of the ways in which Tibetan historians of medicine also adopted these strategies. Historiographical discourse emphasizes specific notions of causality and relationality—in Tibetan literature, for example, it is structured to emphasize logically predetermined chains of events, unbroken lineages, and neatly catalogued textual and geographic records. Bjerken argues that historical narratives thus accurately represent the "Buddhist desire for continuity in the face of change and impermanence, so that the events recorded manifest a coherence, integrity, and fullness that proves so elusive to realize in our partial perspectives and transitory experience."[292] This, indeed, is the aspect of the narrative form that Ricoeur calls central to the expression of narrative identity. Describing a strikingly Buddhist notion, D. Ezzy explains that the term "narrative identity" as Ricoeur uses it suggests that "what we call subjectivity is neither an incoherent series of events nor an immutable substantiality, impervious to evolution. This is precisely the sort of

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[291] Zeff Bjerken, "The Mirrorwork of Tibetan Religious Historians: A Comparison of Buddhist and Bon Historiography" (Ph.D. Dissertation, University of Michigan, 2001), 5. Inspired by Hayden White's analysis of historical writing, Bjerken's dissertation identifies three distinct genres of historiography in Tibetan literature: annals, chronicles, and narratives. Describing annals and chronicles primarily for comparative purposes, Bjerken's discussion focuses mainly on historical narratives, or *chos 'byung*.

[292] Ibid., 85.

identity which narrative composition alone can create through its dynamism." He goes on to say that "narrative identity is coherent but fluid and changeable, historically grounded but 'fictively' reinterpreted, constructed by an individual but constructed in interaction and dialogue with other people."[293]

By examining how the narrative identity of the tradition of medicine is presented by Tibetan historians, I will consider what the "fictive" historiography of medicine contributes to our understanding of the relationship between medical and religious traditions in Tibet. Based primarily on Sangye Gyatso's medical history and the medical histories of several twentieth-century Tibetan scholars, a brief overview of the history of medicine in Tibet will demonstrate that these narratives portray the early period of Tibetan medicine—from the "pre-historical" period to the twelfth century—as a cosmopolitan age in which medical knowledge was collaboratively generated by scholars originating from areas across central Asia. Although these histories situate the mythical origins of Tibetan medicine in lineages of Indian Buddhas and bodhisattvas, the origins of medical knowledge in the regions of Tibet itself are rooted in a polyphony of Indian, Nepali, Chinese, Arab, and other voices. After the period of the seminal twelfth-century figure, Yuthog Yonten Gyatso, however, these historical narratives quiet those international voices, leaving India alone in a position of epistemological authority. The next several centuries are portrayed as a period of prolific textual production and sectarianism, with a focus on medical figures who were closely affiliated with the politico-religious power structure of Tibet.

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[293] Ezzy, "Theorizing Narrative Identity: Symbolic Interactionism and Hermeneutics."

I. Historicizing medicine: The cosmopolitan beginnings of Tibetan medicine

In the reconstructed histories of Tibetan medicine it is clear that tracing the tradition's origins to India is an objective of paramount importance. Despite the emphasis on India, however, interactions with China are commonly recorded, and the conflict felt by Buddhists in early Tibet over acknowledgment of these two great authorities—India and China—is a shaping feature in medical histories as well.

Tibetan histories of medicine such as Sangye Gyatso's trace the spread of medical knowledge from its origins in the realm of the gods to its spread in the human realm, describing famous mythic and historical figures first in India and then in Tibet. As is the case in many Tibetan histories, Tibetan medicine articulates Buddhist origins of a mythical nature, tracing a lineage of instruction to the Buddha himself. The tradition states that the Buddha Sakyamuni taught a medical text called the *Vimalagotra* at his first sermon at Sarnath, and that the *Vinaya* contained instructions to monks on practicing medicinal healing techniques. Other sutras are said to include instructions on healing, and the bodhisattvas Manjusri, Avalokiteśvara, Vajrapaṇi and Tāra are said to have composed treatises on various medical topics as well.[294] While the Āyurvedic physicians Suśruta and Caraka take a place in these histories, the most prominent Indian medical figures in Sangye Gyatso's history are Kumarajivaka *('tsho byed gzhon nu)*, who studied in Taxila, his student

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[294] Kunzang, *Tibetan Medicine,* 11.

Nāgārjuna, who is said to have composed several medical texts,[295] and Nāgārjuna's student Vāgbhaṭa (*dpa po*), author of several texts that became very influential in Tibet, as I discussed in chapter two. Vāgbhaṭa's student Dawa Ngonga composed commentaries on Vāgbhaṭa's texts and a dictionary of *materia medica*.[296]

One of the earliest contacts between India and Tibet in the context of medical history is said to have occurred during the reign of the Tibetan king Lha Thothori Nyentsen (*lha mtho mtho ri gnyan brtsan*), known by Buddhist historians as the first Buddhist king of Tibet.[297] During his reign two doctors are said to have come from India, Biji Gaje (*bi byi dga' byed*) and Bilha Gadze (*bi lha dga' mdzes*), to teach medicine in Tibet. The king is said to have given his daughter to Bilha Gadze, and their son, Dungi Thorchuk (*dung gi thor cag*) is known as the first Tibetan doctor.[298] His sons were appointed chief physicians in the royal

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[295] Ibid., 14. *The Hundred Preparations (sbyor ba brgya pa), Precious Collection* (*gches bsdus*); and others. The three attributed to Nāgārjuna are called Yogasataka, Jīvasūtra, and Avadhesajakalpa. None of the Sanskrit originals are known to exist. Nāgārjuna is discussed also at Sangs rgyas rgya mtsho, *Khog 'bugs*, 120-127.

[296] Kunzang, *Tibetan Medicine*, 14. Vāgbhaṭa is discussed by Sangye Gyatso at 127-147, and his student Zla ba mngon dga' is discussed from 147-148; Sangs rgyas rgya mtsho, *Khog 'bugs*.

[297] Sangs rgyas rgya mtsho, *Khog 'bugs*, 149.

[298] Byams pa 'phrin las, *Bod kyi gso ba rig pa'i 'byung tshul dang 'phel rgyas skor gyi ngo sprod rags bdus* (Lhasa: Mentsikhang, 1986), 2. Also see Sangs rgyas rgya mtsho, *Khog 'bugs*, 213. For a detailed account of the historiography of these early dynastic years in Central Tibet, see Erik Haarh, *The Yar-lung Dynasty* (Kobenhavn: G.E.C. Gad's Forlag, 1969). Haarh explains that according to the prevailing Tibetan tradition, the lineage of Yarlung kings includes 42 kings up to the fall of the Dynasty in 842 AD. These are generally divided into a prehistoric lineage of 32 kings, ending with gnam ri srong btsan, and a historic lineage of 10 kings, beginning with srong btsan sgam po and ending with glang dar ma. Haarh compares various genealogies of kings and queens from a wide variety of texts, concluding that there is one predominating tradition, represented most clearly by the orthodox Buddhist work of the Fifth Dalai Lama. Although Haarh begins with the prehistoric/historic distinction adopted by most Tibetologists (see Stein, for instance, in *Tibetan Civilization*, and even Beckwith, *The Tibetan Empire in Central Asia*), he shows that the Tibetan tradition distinguishes rather between pre-Buddhist and Buddhist periods that do not coincide with the prehistoric/historic divide. As represented by the later Buddhist tradition, the Buddhist period of the Dynasty begins with lha tho tho ri gnyan btsan. Haarh reacts against the rejection of early source material as historically irrelevant, an attitude that maintains the view that the pre-srong btsan sgam po period of the Yarlung Dynasty

court, a tradition that is said to have begun with Dungi Thorchuk.[299] Contacts between the medical traditions of the two great cultures are reported sporadically throughout the next generations of kings.[300] The act of placing the historical origins of the Tibetan medical tradition with Biji Gaje and Bihla Gadze is a clearly polemical move ensuring the centrality of India as the epistemological authority. Still, however, Pasang Yonten emphasizes the notion that various systems of medicine and astrology were brought from China during the reign of Namri Songtsan (*gnam ri slon mtshan*),[301] made king of Tibet in the Yarlung Valley at around 600 AD.

Knowledge of medical practices is said to have grown in Tibet in an internationally collaborative manner. King Songtsan Gampo (*srong btsan sgam po*, d. 649) was closely involved with scholars and traditions from surrounding regions, including China and Nepal, through his two foreign wives, and from India, through scholars such as Tomi Sambhota (*thon mi sambhota*), commissioned by the king to travel to that land. Accounts of his reign describe contact between Tibetan and Chinese medical traditions, with the transport to Tibet of Chinese medical texts by the king's Chinese wife, Jincheng Gongzhu (*kim sheng kong co*). She is said to have brought a text called the *Great Analytical Treatise on Medicine* (*sman dpyad chen mo*), which was translated into Tibetan by Hashang Mahadeva and

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is mythical, in the sense of being fictive. Haarh is willing to take seriously traditional Tibetan perspectives on historical periods and their transformation (contrary to Stein, for instance, who asserts in *Tibetan Civilization* that "Tibetan chronicles teach us scarcely anything about this old religion." R. A. Stein, *Tibetan Civilization* (Stanford: Stanford University Press, 1972), 199.).

[299] Yonten, Rigzin, and Russell, "History," 34. Also see Sangs rgyas rgya mtsho, *Khog 'bugs*, 213.

[300] Kunzang, *Tibetan Medicine*, 14. Also see Dell'Angelo, "Notes," 7.

[301] He points to sa skya je btzun bsod nams rgyal mtsan, *rgyal rabs gsal ba'i me long* (Peking edition, 1981), 61. Yonten, Rigzin, and Russell, "History," 34. See also Sangs rgyas rgya mtsho, *Khog 'bugs*, 149-150.

Dharmakośa. Songtsan Gampo is said to have convened a meeting at his court of three physicians, Bharadhaja from India, Han wang han from China, and Galenos from Persia (or somewhere thereabouts).[302] Pasang Yonten speculates that it is the Greek medical system that Galenos represents, trade-inspired travel having brought him, or at least the tradition he represented, to Turkistan/Tajik.[303] These doctors are said to have translated texts from their own traditions into Tibetan and collaborated on a medical text called *The Weapon of the Fearless One* (*mi 'jigs pa'i mtshon cha*). Unfortunately, none of these texts is known to be extant today. The Indian and Chinese physicians returned home, but Galenos stayed on in Tibet as the court physician. His three sons were physicians as well: his oldest son married into and continued the Biji lineage in upper Tsang (*gtsang stod*), his middle son went south to Yorpo (*gyor po*) and spread the "southern system of medicine" (*lho rong gi sman*), and the youngest son stayed in Central Tibet and was known as the "Sogdian physician" (*sog pa sman pa*).[304] Also renowned during Songsten Gampo's time was a physician from the lineage of Dungi Thorchuk named Lodro Sengyon (*blo gros seng yon*); the latter's son, Yuthog Deje

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[302] Sangs rgyas rgya mtsho, *Khog 'bugs*, 150.

[303] Yonten, Rigzin, and Russell, "History," 33. Galen was an extremely influential physician from the Greek medical tradition who lived from 129-199 AD. Certainly it is not he, but rather simply a representative of the Greek tradition generally, that is meant by this figure active in Tibet. Unani medicine was also at this time a prominent system of medicine in Baghdad, present-day Iraq, so it is not entirely clear that it is Greek medicine represented by the figure known as Galenos. Pasang Yonten states that while the Indian and Chinese medical traditions were referred to by their country of origin, the tradition of Galenos from Tazik was referred to as the Upper Tibetan or Galenic system. Pasang Yonten speculates (unconvincingly) that this is due to the similarities between Greek medicine and an indigenous Tibetan Bon system of medicine, claiming that in both systems pulse and urine analysis and bloodletting are prominent. Yonten, Rigzin, and Russell, "History," 36. On the possible relationships between Greek medicine and Tibetan medicine, see Christopher I. Beckwith, "The Introduction of Greek Medicine into Tibet in the 7th and 8th Century," *Journal of the American Oriental Society* 99 (1979); Marianne Winder, "Tibetan Medicine Compared with Ancient and Mediaeval Western Medicine," *Bulletin of Tibetology (Gangtok, Sikkim)* 1 (1981).

[304] Kunzang, *Tibetan Medicine*, 15. Sangs rgyas rgya mtsho, *Khog 'bugs*, 150-151.

Besa (*g.yu thog 'dre rje bad sra*), became the court physician for king Mangsong Mentsen (*mang srong man btsan*, 649-679) and is said to have traveled to India.

The cosmopolitan nature of Tibetan medical development continued with the next several monarchs. During the reign of king Tride Tsugtsan (*khri lde gtsug btsan*), also known as Me Agtsom (*mes ag tshom*), which began in 712, the court physician, named Dragti (*brang ti*), authored a text called *Brang ti hi pod khra pod dmar*, a rare copy of which exists today in the Lhasa *Mentsikhang* library,[305] and began a lineage of important medical scholars that spanned several centuries. A Chinese woman, Kimshang Kongjo (*khyim shang kong jo*), who had been invited into the royal family during Me Agtsom's reign, is said to have brought medical and astrological texts to Tibet during this period as well.[306] Sangye Gyatso states that according to one theory, these are the texts that were gathered together under the title, *King of the Moon*.[307]

At this time a physician named Champashila (*tsam pa shi la*), also known as Biji (*bi ji*), was invited to Central Tibet from Eastern Tibet; he is said to have translated the fifty-

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[305] Kunzang, *Tibetan Medicine*, 15. The medical historian Yangga claims this book is radically different than the *Four Tantras* (personal communication, Lhasa, 2002). The copy in the *Mentsikhang* library is quite thick, in Ume script with copious and sometimes illegible interlinear notes and some illustrations; it appears to consist mainly, if not entirely, of nosological and pharmacological content. Sangye Gyatso discusses this figure at Sangs rgyas rgya mtsho, *Khog 'bugs*, 291-293.; subsequent pages describe the various literary compositions of others in the brang ti lineage. Further investigation of this issue is warranted; I wonder if the text was intentionally neglected as a rival tradition to that of the *Four Tantras*.

[306] Dan Martin states that Me Agtsom himself took a Chinese wife (see Martin's timeline, which he states is "Based primarily on an outline by Michael Aris compiled from chronologies by Christopher Beckwith, Hugh Richardson and David Snellgrove, Helmut Hoffmann & Melvyn Goldstein" at http://iris.lib.virginia.edu/tibet/collections/history/timeline_general.html). Rechung Rinpoche, basing himself on Sangye Gyatso's history, claims that it was Me Agtsom's son, ljang tsha lha dpon, who did so. Sangs rgyas rgya mtsho, *Khog 'bugs*, 151.

[307] Interestingly, Sangye Gyatso attributes the tradition of claiming Nāgārjuna as the author of the *King of the Moon* (*so ma ra dza*) to the *blon po bka' thang*. Ibid., 152.

chapter *Crystal Mirror Treatise* (*rgyud shel kyi me long*), adding sixty-seven chapters on anatomy. Sangye Gyatso attributes numerous translations to him, including texts on dissection, wound treatment, diagnosis, therapeutics, and pharmacology.[308] Sangye Gyatso names several other Chinese physicians responsible for the translation of medical texts into Tibetan during this period as well. The Eastern Tibetan physician Biji was appointed court physician.[309] With the reign of king Trisong Detsen (*khri srong lde btsan*, reigned 756-797), during which time the Tibetan empire reached its zenith, the royal interest in Buddhism initiated by Songsten Gampo was intensified. As in the previous monarchies, however, medical connections to China continued to flourish through royal support. Biji, joined by an Indian physician Dharamraja (*dha rma ra dza*) and a Chinese physician Hashang Mahakinda (*ha sheng ma hra khyin da*), continued to produce medical texts and translations, including a series of texts attributed to Nāgārjuna. Again, Sangye Gyatso names additional Chinese physicians also responsible for the proliferation of medical texts at this time.[310]

It is during this period that the tantric master Padmasambhava and the Bengali scholar Santarakśita, invited to Tibet by Trisong Detsen, laid the foundations for Buddhist tantric and monastic traditions in Tibet. Recognized as the founder of tantric traditions in Tibet, Padmasambhava is credited with initiating Tibetan lineages of the *Vajrakila*,

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[308] The names of nearly thirty texts are listed at Ibid., 154-155. Several more texts attributed to Biji are also listed at Sangs rgyas rgya mtsho, *Khog 'bugs*, 158. Although I am not aware of texts from this period being available or published today, Rechung Rinpoche states that many medical texts that were translated between the time of Me Agtsom, who flourished around 710, and the coronation of Trisong Detsen in 754 have been preserved in Tibet. Kunzang, *Tibetan Medicine*, 16.

[309] His three most prominent students were called shang lha mo gzigs, stong bsher mes po, and brang ti rgyal mnyes. Sangs rgyas rgya mtsho, *Khog 'bugs*, 155.

[310] The names of over sixty texts are listed at Ibid., 156-160.

Hayagriva, Guhyagarbha and other tantras, with composing texts on a wide range of subjects, including medicine, and with concealing many "treasure" texts (*gter ma*), discovered centuries later in various locations around Tibet. Padmasambhava, known as a manifestation of Amitabha and Avalokiteśvara, is considered the ultimate "author" of thousands of treasure texts later taken from rocks, bodies of water, temples, architectural elements such as columns, or the minds of visionaries. While nearly all forms of Tibetan Buddhism acknowledge the importance of certain treasure texts, which span a full range of subject matter, including historical, doctrinal, liturgical and medical treatises, the Nyingma tradition in particular relies on treasure texts as authoritative.

Another chief figure in Nyingma history, Vairocana, is said to have studied the *Four Tantras* and other texts in India with Vāgbhaṭa's student, Dawa Ngonga. He also credited with the translation of and composition of numerous medical texts, sometimes under the pseudonym Chobar (*chos 'bar*), according to Sangye Gyatso.[311] According to the treasure tradition (*gter ma'i lugs*), Sangye Gyatso explains, Vairocana presented the *Four Tantras* to the king and to Padmasambhava, but on Padmasambhava's advice the text was then hidden in a pillar at Samye. It is due to this prominence in the history of the *Four Tantras* that Vairocana is placed prior to Padmasambhava in the lineage of medical authorities.[312]

The final decades of the eighth century and the beginning of the ninth century thus saw a rise in Tibetan Buddhist writing that continued through the two subsequent reigning

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[311] Ibid., 166-168. For a detailed description of his contributions to the medical tradition, see Sangs rgyas rgya mtsho, *Khog 'bugs*, 163-169.

[312] Sangs rgyas rgya mtsho, *Khog 'bugs*, 169.

kings. Influential Buddhist intellectuals active in Tibet during the eighth century include the Mahāyoga masters Vimalamitra, Buddhaguhya, and Śāntigarbha. Indian and Tibetan scholars worked together to translate Buddhist sūtras, śastras and other texts, including medical texts, from Sanskrit into Tibetan. The intellectual exchange across the Himalayas crossed both ways, as Indian masters were invited to Tibet and Tibetans, such as Vimalamitra of Great Perfection fame, and the legendary eighth-century Yuthog Yonten Gonpo himself, are said to have traveled to India to study.[313] This was an extremely productive period in Tibetan scholarship: the ninth-century Tibetan Denkar (*ldan dkar*) catalog documents over seven hundred translated works, a count that does not include a great many tantric texts and Tibetan authored texts on non-canonical topics.[314]

During the reign of Trisong Detsen a medical congress was convened at Samye, said to have been led by the legendary eighth-century figure, Yuthog Yonten Gonpo. Trisong Detsen's meeting convened scholars from various neighboring regions, including Santigarbha

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[313] The question of whether there are, in fact, two individuals named Yuthog Yonten Gonpo is debated by some Tibetan scholars. Samten Karmay notes that because the biography of the twelfth-century Yuthog Yonten Gonpo written by his student, Sumton Yeshe Zung, does not even mention an earlier Yuthog Yonten Gonpo in the eighth century, the very existence of such a figure must be seriously questioned. Karmay notes that sog zlog pa blo gros rgyal mtshan (1552-1624) likewise does not accept the existence of two Yuthogs. Karmay, "Vairocana and the rgyud-bzhi," 21 and 29, ff 14, . In the preface to the lengthy biography of Yuthog Yonten Gonpo that is translated into English by Rechung Rinpoche in the volume *Tibetan Medicine*, Rechung Rinpoche states that the biography was first block printed by dar mo sman pa blo bzang chos grags (1638-1710), the court physician of the Fifth Dalai Lama, who had acquired it from a descendent of Yuthog Yonten Gonpo named lhun grub bkra shis. Kunzang, *Tibetan Medicine*, vii. This translation makes no clear distinction between the events of the eighth-century figure and that of the twelfth-century Yuthog, eliding the two as if a single man lived over 400 years. There is also a sixteenth-century biographical sketch of Yuthog Yonten Gyatso in the *mkhas pa'i dga' ston* mentioned in Gerke, "Authorship of 'Cha lag bco brgyad'," 34., although I do not know whether it describes the eighth-century Yuthog Yonten Gyatso or the figure of the same name who lived in the twelfth century. Sangye Gyatso's history discusses both Yuthogs at Sangs rgyas rgya mtsho, *Khog 'bugs*, 206-284.

[314] Lalou, "Les texts Bouddhiques au temps du Roi Khri-sron-lde-bcan."

from India; Guhyavajra from Kashmir; Tongsum Gangba (*stong gsum gang ba*), Hashabala (*ha sha ba la*), and Hantipata (*han ti pata*) from China; Halashanti from Persia; Sengdo Ochen (*seng mdo 'od chen*) from Guge; Kyolma Rutsi (*khyol ma ru tsi*) from Dolpo; and Dharmashala from Nepal. These scholars were asked to translate medical texts from their own languages into Tibetan; this effort is said to have resulted in the translation of scores of medical texts from Sogdia (*kha che*), Turkistan (*stag gzig*), Drugu (*gru gu*), Nepal (*bal bo*), Dolpo (*dol bo*), and India.[315] Trisong Detsen retained the Chinese scholar called Tongsum Gangba as his chief physician, and gifted to this doctor an area of land where the doctor and his descendents settled and were known as the "foreign doctors" (*mtha' bzhi sman pa*).[316] A famous group of nine students from three regions of Tibet, known as "the nine scholars of Tibetan medicine" (*bod sman mkhas pa mi dgu*),[317] were subsequently trained in medicine by this physician.

With the reign of King Lang Darma (*glang dar ma*, d. 847) a persecution of Buddhism in Tibet resulted in the defrocking of monks and the destruction of Buddhist temples and monasteries. The Yarlung Empire fell, and for the next century Buddhism in Tibet lacked centralized royal or state support, surviving only in local family lineages until

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315 Kunzang, *Tibetan Medicine*, 17. Sangs rgyas rgya mtsho, *Khog 'bugs*, 169. The names of nearly sixty medical texts are listed in Sangs rgyas rgya mtsho, *Khog 'bugs*, 171-174. The medical congress is described in the eighth-century Yuthog's biography, translated by Rechung Rinpoche, beginning at Kunzang, *Tibetan Medicine*, 202. I do not know what location is meant by Drugu (*gru gu*).

316 Sangs rgyas rgya mtsho, *Khog 'bugs*, 175.

317 From upper regions of Tibet, cher rje shig po; 'ug pa chos bzang, bi che legs mgon; from Central Tibet, g.yu thog yon tan mgon po, mi nyag rong rje, brang ti rgyal bzang; and from lower Tibet, gnya' pa chos bzang, mtha' bshi dar po, stong pa grags rgyal. Ibid., 174. The development of this group of nine Tibetan doctor is said to have been prophesied by the eighth-century Yuthog Yonten Gyatso; see Yuthog's biography as translated at Kunzang, *Tibetan Medicine*, 203.

the Buddhist revival period beginning at the end of the tenth century. While this period marks a break between two eras that are referred to in the Buddhist tradition as the "early propagation of the doctrine" (*snga dar*) and the "later propagation of the doctrine" (*phyi dar*), Sangye Gyatso argues that the medical tradition was continuous without interruption. Characterizing Tibetan medicine as a medical system developed collaboratively by ten international and indigenous traditions, he claims that it grew gradually in Tibet from the time of Songsten Gampo, and that the Buddhist periodization scheme is therefore inappropriate for the medical tradition.[318]

The movement known in Buddhist historiography as the "later propagation of the doctrine" began in Western Tibet with the king Yeshe Od (*ye shes 'od*), who sent a group of Tibetans to India to become translators of Buddhist texts; this mission produced Rinchen Zangpo (*rin chen bzang po*, 958-1055) and Ngog Legpe Sherab (*ngog legs pa'i shes rab*). These two figures and their immediate students traveled extensively, produced many medical texts, and spawned several generations of medical scholars. Rinchen Zangpo studied and translated the works of Vāgbhaṭa and his commentator, passing this knowledge as a (retroactively appointed) lineage founder to many students. Sangye Gyatso records the names of many people who studied medical texts with Rinchen Zangpo; his four most famous medical students were known as the "four great Ngari doctors."[319] From the lineage of one of these

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[318] Sangs rgyas rgya mtsho, *Khog 'bugs*, 175-176. The ten systems he lists that influenced the makeup of Tibetan medicine are kha che, oyn, dbus, bal bo, ta zig, dol bo, hor, mi nyag, li, and khrom. Sangs rgyas rgya mtsho, *Khog 'bugs*, 176.

[319] Namely, myang 'das seng ge sgra, stag bri ye shes (also called shag khri ye shes), 'byung gnas, 'ong sman 'a ye, and mang mo mang btsun. One of these, Mangmo Mangtsun was especially renowned in this group, and

four emerged Darma Gonpo, who wrote two still extant nosological texts, which are said to have been central in a distinctive Bodong (*bo dong*) medical tradition.[320] After studying briefly with the translator Ngog Legpe Sherab, a scholar named Zhang Zijidbar (*'khrungs pa zhang gzi brjid 'bar*) traveled to India to study at Nalanda. Upon his return to Tibet he wrote numerous medical texts and taught many students.[321] Also active at this time was Konchog Kyab, whom I mentioned in chapter two as the scholar who passed the *Four Tantras* to Yuthog Yonten Gonpo after receiving it from Drapa Ngonshe's student, as well as many others who authored and revealed medical literature.[322]

Even if we accept Sangye Gyatso's argument that the medical tradition developed continuously through the centuries following the early kings of Tibet, still the radically changing religious landscape during this period must certainly have had an effect on medical traditions as well. The religious revival that ensued as a result of the activity originating in Western Tibet included scholars that became known as founders of the great Sarma schools of Tibetan Buddhism: Marpa (*mar pa lo tsa ba*, 1012-1096), founder of the Kagyu tradition, Kyungpo Neljor (*khyung po rnal 'byor*), founder of the Shangpa Kagyu tradition, and

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his most prominent student was cher rje ti pa, who in turn taught cher rje zhang ston zhig po. The latter composed a history of medicine that has only recently found to be extant. Cher rje zhang ston zhig po's student was gtsang stod dar ma mgon po.

320 Rechung Rinpoche, 19. Sangs rgyas rgya mtsho, *Khog 'bugs*, 178-179.; for comments on dar ma mgon po in particular see Sangs rgyas rgya mtsho, *Khog 'bugs*, 179. Gtsang stod dar ma mgon po, *Slob ma la phan pa'i zin tig: a collection of instructions on Tibetan medicine and treatment* (Gangtok: Sherab Gyaltsen Lama, 1976); Gtsang stod dar ma mgon po, *Slob ma'i don du zin thig and Bu la gdams pa yang thig: two works on the essentials of Tibetan medical practice* (Leh: Tsering Paljor, 1975).

321 Sangs rgyas rgya mtsho, *Khog 'bugs*, 180-182.

322 The contributions to medical literature made by many figures active during this period are recorded at Ibid., 290-296., in addition to sections of Sangye Gyatso's text mentioned above. Many figures known primarily for their contributions to the religious canon are also mentioned here as authors of medical texts.

Drogmi (*'brog mi lo tsa ba*, 992-1072), founder of the Sakya tradition. The trajectory of the newly developing Sarma schools was shaped largely by Yeshe Od's outspoken rejection of certain tantric Buddhist practices, particularly those derived from the Guhyagarbha tantra, which was of special importance to the Nyingma traditions. Yeshe Od commanded his translators to follow Mahāyāna doctrine, and in 1042 he invited Atisa (987-1054) from Bengal to strengthen in Tibet a form of monasticism that would complement tantric practice. Atisa's followers established the Kadampa school of Tibetan Buddhism, and their emphasis on traditional Mahāyāna forms of practice led to continued denunciation of many Nyingma tantras, some of which were even deemed non-Buddhist. As Sarma translators infused a steady stream of new ideas from India into Tibet and promoted the notion that only these Indian texts were authoritatively Buddhist, the tone between the developing Sarma schools and the Nyingma traditions, which relied on texts that had lain on Tibetan soil much longer, grew increasingly hostile. It is perhaps this atmosphere that led eventually to the formation of clearly divergent medical traditions in the fifteenth century, as well as to the slowly narrowing scope of medical knowledge and the effective "Buddhification" of much of medical scholasticism.

II. The heyday of medical scholasticism

José Cabezon labels the extremely prolific period of the thirteenth to sixteenth centuries in Tibet "the heyday of Tibetan scholasticism,"[323] and indeed this appears to have been the case in medical traditions as in other schools of Tibetan thought and practice. If the

[323] Cabezon, "Authorship and Literary Production," 236.

beginnings of Tibetan medicine—the period up to, and perhaps including, the seminal twelfth-century figure, Yuthog Yonten Gonpo—were characterized in later histories by the internationally collaborative nature of medical knowledge, the next several centuries took on a different cast entirely. Politically, whereas Tibet had previously dominated surrounding lands and cultures, the next centuries saw Tibet fall under the rule of a series of powerfully hegemonic leaders. Despite the efforts of Tibetan Buddhist Sakya dignitaries to appease the warring Central Asian Mongols led by Genghis Khan, in the thirteenth century Mongol raids penetrated Tibetan regions. With the Buddhist influence of Sakya Pandita (1182-1251) on the Mongol ruler, Godan Khan, a wary peace settled between the two leaders, and although the Mongols maintained control over Tibet, Tibetans themselves were allowed administrative rule. For several generations after the deaths of Sakya Pandita and Godan Khan, the Buddhist "patron-priest" relationship continued between the rulers of the two regions. Infighting raged between large monastic institutions in Tibet during the thirteenth century, however, and after Mongol rule subsided at the beginning of the fourteenth century, Tibetan rival factions finally managed to dislodge Sakya hegemony.

While in the twelfth and thirteenth centuries Tibetans were looking northward toward Mongol regions politically, culturally it was southward to India that they looked for intellectual authority. It was into the twelfth-century context of growing sectarianism and intellectual allegiance to India that Yuthog Yonten Gonpo (1112-1203) emerged. Like his legendary eighth-century namesake, Yuthog is remembered as having begun his study of

medicine as a child and traveled to India numerous times as a young adult.[324] In addition to revising or enhancing the *Four Tantras*, he is considered the author of portions of the *Eighteen Additional Practices*, as well as numerous other texts that are no longer extant.[325] Yuthog's many students continued his teachings, and it is said that the texts produced by these physicians, including those of the *Eighteen Additional Practices* collection and the several texts produced by Yuthog's famous twelfth-century student Sumton Yeshe Zung (*sum ston ye shes gzung*), dominated medical scholarship for several generations.[326] One of the earliest histories of Tibetan medicine was composed by an unidentified student of Yuthog, and is now part of the *Eighteen Additional Practices* collection. Samten Karmay notes that this is the first text "primarily devoted to the presentation of the medical system (*gso rig*) as an indispensable part of Buddhist religious practices."[327] Also prominent during this period were physicians descended from the family of the eighth-century court physician named Drangti, mentioned above. Drangti Jampal Zangpo (*brang ti 'jam dpal bzang po*, twelfth-thirteenth century), for example, is said to have studied the *Four Tantras* and *Eighteen Additional Practices* with Yuthog himself, and he later become a high-level attending

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[324] Sangye Gyatso's account of the twelfth-century Yuthog's life begins at Sangs rgyas rgya mtsho, *Khog 'bugs*, 225.

[325] For Sangye Gyatso's lists of texts authored by the twelfth-century Yuthog, see Ibid., 275-284.

[326] Taube's chapter on the *Eighteen Additional Practices* claims that it was of major importance from the twelfth-sixteenth centuries, until Sangye Gyatso's critique of it removed it from circulation. Gerke, "Authorship of 'Cha lag bco brgyad'," 27; Taube, *Medizinischen Literatur Tibets*, 39-50. Sangye Gyatso's discussion of Sumton Yeshe Zung begins at Sangs rgyas rgya mtsho, *Khog 'bugs*, 284. Sangye Gyatso quotes extensively from a biography of the twelfth-century Yuthog written by Sumton Yeshe Zung, a text that exists as part of the *Eighteen Additional Practices* collection. Sangye Gyatso lists several other early biographies of Yuthog, by figures named g.yu thog kha rag lha rje and kong bo bde rgyal, neither of which are known to exist today. Sangs rgyas rgya mtsho, *Khog 'bugs*, 290.

[327] Karmay, "Vairocana and the rgyud-bzhi," 22.

physician for the Sakya leadership. Successive members of the Drangti family—several of whom were prolific authors—held this post in the Sakya government as well.[328]

In the early fifteenth century, after the Sakya leaders had been deposed and a series of independent monastic leaders were ruling Tibet, the charismatic religious figure Tsong Khapa (1357-1419) founded the Geluk school, which became known for its monastic discipline and scholarship. Later Geluk dignitaries reinstated contacts with the Mongols, a relationship that initiated the institution of the Dalai Lama and resulted in the conversion of the Mongols to the Geluk Buddhist tradition. This was a period for the organization of distinct traditions in medical history as well, and the fifteenth century saw the development of two distinct schools of Tibetan medicine, the Jang tradition (*byang lugs*) and the Zur tradition (*zur lugs*), that dominated the organization of medical teachings for the next two centuries, until the time of the Fifth Dalai Lama. The founder of the Jang tradition was Jangdag Namgyal Dragzang (*byang dag rnam rgyal grags bzang,* 1395-1475), known as Jangpa. Said to have had medical talents since childhood, Jangpa was a friend of the second Dalai Lama, Gendun Gyatso (*dge 'dun rgya mtsho,* 1475-1543), and was the author of numerous medical texts. Ordained as a Buddhist monk, he is said also to have been a skilled religious scholar, authoring religious texts and teaching religion.[329] The Jang tradition flourished until the time of Desi Sangye Gyatso, who was critical of the school and effectively terminated its further development.[330] Gerke notes that the seventeenth-century

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[328] Sangs rgyas rgya mtsho, *Khog 'bugs,* 292 onwards.
[329] Ibid., 306-312.
[330] Taube, *Medizinischen Literatur Tibets,* 53.

medical history by Jaya Pandita does not even mention the Jang tradition or its scholars, and the nineteenth-century medical history by Akhu Rinpoche (*a khu rin po che shes rab rgya mtsho*, 1803-1875) lists the works of Jang founder Namgyal Dragzang under the category of "rare literature."[331]

The founder of the Zur tradition was Zurkhar Nyamnyi Dorje (*zur mkhar mnyam nyid rdo rje*, b. 1439).[332] Like the founder of the Jang school, Nyamnyi Dorje is known for his religious as well as medical scholarship. He is said to have been heavily influenced by the *Heart Essence of Yuthog* (*g.yu thog snying thig*) teachings and is credited with authorship of several chapters of that collection as it exists today. He is said to have relied a great deal on the Buddhist tantras in his medical writings as well. Nyamnyi Dorje is known especially for furthering the advancement of Tibetan pharmacology through convening a pan-regional medical conference devoted to the topic, after which he composed numerous texts on pharmacy and *materia medica*, including the text for which he is today the most famous, the still-used *Ten Million Relics* (*bye ba ring bsrel*).[333] Among the many students of this tradition is Kyempa Tsewang, the *Four Tantras* commentator to whom I have referred often earlier in this work. Secondary scholarship has not been done on the distinguishing features of these

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331 Barbara Gerke, "On the History of the Two Tibetan Medical Schools: Janglug and Zurlug," *AyurVijnana* 6 (1999): 20.

332 Sangs rgyas rgya mtsho, *Khog 'bugs*, 329 onwards. He is sometimes also called Abo Choje (*a bo chos rje*). There is also a biography of this figure in the recently published Bkra shis tshe ring, *Bod kyi gso ba rig pa'i ched rtsom gces btus* (bod ljongs mi dmangs dpe skrun khang, 1994).

333 Zur mkhar nyam nyid rdo rje, *Bye ba ring bsrel / instructions of the great Zur-mkhar nyam-nyid-rdo-rje on medical treatment, comprising the Ma yig, Bu yig, and Kha 'thor collections.* (Leh: S.W. Tashigangpa, 1974); Zur mkhar nyam nyid rdo rje, *Bye ba ring bsrel: a reproduction of the 18th century Sdedge redaction of a version of the collected instructions on medical practice of Zur-mkhar Mnyam-nyid-rdo-rje.* (Gangtok: Sherab Gyaltsen Lama, 1977). Scores of additional texts produced at this time are listed at Sangs rgyas rgya mtsho, *Khog 'bugs*, 332-334.

two schools—the Jang and the Zur—and it is difficult to identify precisely how they differ. Fernand Meyer suggests that "their only areas of disagreements were on specific questions such as the localization of a few channels or points of intervention in the body, as well as the identification of certain drugs," and that there may also have been regional alliances distinguishing the schools.[334]

Said by some scholars to be the nephew of Zurkhar Nyamnyi Dorje,[335] the great scholar Zurkhar Lodro Gyalpo (1509-1579), author of the *Transmission of the Elders*, is generally considered part of the Zur school, although he received training in both traditions. Lodro Gyalpo spent his life as a monk in Tsurpu (*mtsur pu*) and was a serious scholar of religion, authoring numerous religious texts and studying widely with various contemporary experts, including the eighth Karmapa in Gampopa's Kagyu school, Mikyod Dorje (*rgyal ba karma pa mi bskyod rdo rje*, 1504-1554), and others.[336] He spent time in residence at Sakya monastery as well, a site renowned for medical education, receiving teachings on several important medical treatises there.[337] Lodro Gyalpo is famous for having discovered a hidden edition of the *Four Tantras* penned by Yuthog himself, and on the basis of this he created a revised edition of the classic text subsequently known as the Dratang edition of the *Four Tantras* (*gra thang rgyud bzhi*), published posthumously in 1640.[338] Lodro Gyalpo's famous *Transmission of the Elders* was the last text to be clearly identified as part of the Zur medical

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[334] Meyer, "Introduction: The Medical Paintings of Tibet," 3.
[335] Yonten, Rigzin, and Russell, "History," 43. Sangye Gyatso's history does not seem to mention this fact (see Sangs rgyas rgya mtsho, *Khog 'bugs*, 349-350.; Pasang Yonten does not mention his source.
[336] Yonten, Rigzin, and Russell, "History," 44. Sangs rgyas rgya mtsho, *Khog 'bugs*, 349.
[337] Gerke and Bolsokhoeva, "Namthar of Zurkha Lodo Gyalpo (1509-1579)," 29-30.
[338] Ibid.: 31, citing Pasang Yonten.

school.

III. Narrating Tibetan medical history

After the period of the twelfth-century Yuthog Yonten Gonpo, emphasis in the Tibetan medical historiography of Desi Sangye Gyatso thus shifted from a focus on the internationally collaborative nature of Tibetan medical knowledge to a highlighting of the prolific scholarship produced by great Tibetan doctors. Such a history reports that these doctors were famous not only for their medical talents but for religious erudition as well: many were monks, residing at the prominent monastic institutions of the day and studying with leading Buddhist teachers. Many were also members of politically influential families, or otherwise closely connected to the political leadership. As Buddhist monastic institutions formed cohesive, powerful identities around the charisma of significant religious leaders, medical institutions were also created, their identities defined by politically savvy, scholarly men and their textual accomplishments. The medical history written by Sangye Gyatso in the seventeenth century thus defines medicine in much the same way that certain politically dominant forms of religion were defined at the time. Relying on a Sarma-style emphasis on the centrality of monastic institutions and the valorization of Indian models of authority, Sangye Gyatso paints the history of the medical tradition in a way acceptable to the Sarma-dominated political authority of his own era. What we cannot know by this account, of course, is what types of localized and popularly-oriented activities may have been conducted by physicians during these centuries.

While the specific doctrines and teachings of the various medical and religious

traditions are obviously different, many of the prominent historical narratives of these traditions are stylized in remarkably similar ways, as I will show in the next few pages. What the stylized structure of historiography conveys is not superficial, for history defines the past, and the past is the core of one's identity in the present. By presenting the history of medicine in a similar manner as the history of Buddhism, therefore, medical knowledge was effectively and fully claimed, according to the medical histories available to us today, at least, as part of the Buddhist religious hegemony of Tibet.

III. a. Taming the past through historiography

In his study of Tibetan historiographical style, Bjerken explains that many Tibetan historical narratives participate in the Buddhist preoccupation with causality by presenting their stories in a highly ordered and methodical fashion. Such histories portray the past as systematically organized by laboriously configured outlines (*sa bcad*) and periodization schemes, thus "'taming' (*dul ba*) the wild profusion of existing legends, oral traditions, histories, and scriptural sources about a given topic."[339] Sangye Gyatso's medical history is organized according to a series of temporally sequential topics: medicine in the realm of the gods, Indian medical history, medicine in imperial Tibet, and so forth. Kalsang Trinley's and Jampa Trinley's modern histories of Tibetan medicine are both similarly structured.[340] In such a model, the past determines the present, and the events of history are therefore "ruled more by the logic of karma and causal connections than by auspicious coincidence or

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[339] Bjerken, "Mirrorwork", 72.

[340] Byams pa 'phrin las, *Krung go'i bod kyi gso ba rig pa* (krung go'i bod kyi shes rig dpe skrun khang, 1996); Skal bzang 'phrin las, *Bod kyi gso ba rig pa'i byung 'phel gyi lo rgyus.*

happenstance."[341] As Bjerken points out, historical narrators call attention to rhetorical seeds planted in the past predetermining the flowering of certain events in the future. Tibetan medical histories seem to be no exception in this regard, closely following the model of the Buddhist histories (*chos 'byung*) that Bjerken describes. Prophesies—a pan-Asian historical strategy for showing continuity—are used repeatedly to tie the legendary eighth-century Yuthog Yonten Gonpo to his twelfth-century descendent; in the seventeenth-century biography of Yuthog, the good doctor is said to have foreseen many of the events of medical history that are described in later historical works.[342] Yuthog's life is guided by prophetic dreams, encounters with *ḍākinī*, the songs of Buddhas in the sky, and serendipitous meetings with famous Buddhist teachers, all of which are common Tibetan Buddhist techniques for structuring legendary, biographical, and historical information.

III. b. History as the record of textual production

Bjerken explains that Tibetan historical narratives did more than organize historical events and personages—equally central to their mission was the classification of texts. A primary function of prominent Buddhist histories was the identification of important texts, their lineages, and their place in Tibetan literature as a whole.[343] These histories catalogued Buddhist canonical literature in detail; "so authoritative and systematically organized was Bu ston's *Chos 'byung*," Bjerken comments, "that it came to serve as the preface and table of

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[341] Bjerken, "Mirrorwork", 72.
[342] Kunzang, *Tibetan Medicine*, 203.
[343] Bjerken refers to histories such as bu ston's *Chos 'byung* or spa stan's *Dar rgyas gsal sgron*. Bjerken, "Mirrorwork", 74.

contents for the Snar thang edition of the Tibetan canon."[344] Where many historiographical traditions focus on histories of warfare, then, Tibetan histories are more commonly histories of literary production. Indeed, we have seen that Sangye Gyatso's medical history is a prime example of this model, providing the names of hundreds, if not thousands, of medical texts. Often the only noteworthy feature of an individual's life is the texts he or she composed or contributed—in fact, so pervasive is this trope that we might argue it is the recording of texts that drives the narrative, with authors mentioned as descriptive of texts, rather than the reverse.

As it happens, this dry chronicling of texts can, in fact, tell us something interesting about embryology. Sangye Gyatso's medical history lists many hundreds of medical texts translated into Tibetan or composed in Tibetan prior to the seventeenth century. Although the vast majority of these works are not now known to have survived, Sangye Gyatso frequently describes the contents of the texts he mentions, either briefly, such as by stating that a text is, say, "on treating the eighteen infectious diseases," or more fully, by providing a table of contents for the text. We may therefore make tentative conclusions on the range of medical subject matter published on the basis of the texts' titles and their descriptions as recorded by Sangye Gyatso. It seems to be the case that most medical texts listed in this history—by my rough estimate, perhaps ninety percent of those mentioned—are about the diagnosis, classification, or treatment of diseases, or about the preparation of medicines. Further speculation on the contents of these types of texts is possible using the example of

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[344] Ibid., 75.

surviving texts of similar types. For instance, we now have three texts, mentioned above, by Darma Gonpo (*dar ma sgon po*), in the medical lineage of Rinchen Zangpo and probably active in the twelfth century, that discuss in an itemized manner the treatments of various fevers, wounds, and miscellaneous diseases, with format and content similar (although not identical) to the *Four Tantras*' third and fourth books. From roughly the same period we also have the texts of the *Eighteen Additional Practices*; although two of these are direct commentaries on the *Four Tantras' Explanatory Tantra*, nine texts from the collection are about diseases and their treatment, again in the manner of the *Four Tantras*' third and fourth books. This type of text can also be found in the *Storehouse of Precious Treasures* (*rin chen gter mdzod*), a collection of medical texts revealed by Padmasambhava, Vimalamitra, Vairocana and others.[345]

Such texts continue to be written and published today and are important references for practicing physicians. As I described in chapter two, this type of medical literature is commonly in the format of a reference work, with short paragraphs describing topics that are listed according to some sort of classificatory scheme. These texts do not typically include independent discussions of the structure or functions of the human body, adult or fetal. With the exception of the *Four Tantras* and its commentarial tradition, therefore, it appears that only a fairly small percentage of circulated work on Tibetan medicine is likely to have contained material on embryology. According to a rough quantitative evaluation of the range

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[345] Texts from this collection relevant to medicine are published in *rin gter sman yig gces btus*. The entire collection is *The Storehouse of Precious Treasures* (*rin chen gter mdzod*) of miscellaneous authorship, compiled and edited by Jamgon Kongtrul Lodro Thayay in 111 volumes (Paro: Ngodrup and Sherab Drimey, 1976).

of pre-fourteenth-century texts classified by Tibetan historians as being on Tibetan medicine, the explicit explication of the human body simply does not seem to have been a very important topic for medical writers. If it is the case that religious thinkers manipulated embryology for their particular philosophical or soteriological needs, as we have seen throughout this dissertation, here again we may observe that the tradition of embryology was significantly less vital in the *early* medical tradition. As I argued in chapter five, however, this seems to have changed by the fifteenth century, when the influence of religious texts and religious education began to define medical scholasticism in new ways.

III. c. Emphasizing geography

Earlier, I discussed the significance of semantically charging the spaces in which a narrative's events take place: for some embryologists the womb was described as a horrific site, while others emphasized the womb's function more hopefully as a container of potentiality for enlightenment. Such an emphasis on physical geography is a key feature of Tibetan historical narratives as well.[346] Biographies of important figures take great care to note precisely where people traveled; biographical and historical accounts are often so focused on travel that the geographic tracking of an individual across the soils of Asia provides the structural basis for the biographical narrative itself. Important figures are generally identified by their region of provenance—despite their great travels, therefore, individuals possessed an inherent relationship with a certain region, even when they may have ended up spending much of their lives elsewhere. They did not simply live *in* a certain

[346] Bjerken, "Mirrorwork", 83.

place; they were, in a fundamental way, *of* a certain place. Places are themselves often deeply historicized as well, and many of the most important historical figures are famous precisely because of their connections with specific physical locations, such as being responsible for the construction of concrete sites for the performance of religious activities.

The recording of travels to India in particular was a means of emphasizing Tibet's essential connections with that culture. While Sangye Gyatso identifies many Tibetans who studied medical texts with Rinchen Zangpo, some still traveled to India for additional medical training, among them Zhangton Zijidbar (*zhang ston gzi brjid 'bar*) from Yarlung, who went to study at Nalanda, and Konchog Kyab, student of Drapa Ngonshe.[347] The biography of both Yuthog Yonten Gonpos is largely organized by their travels to India—each Yuthog is said to have trekked the arduous trail between Tibet and India six times. While Losang Chodrag's biography of Yuthog provides a more dramatic rendition of his religious and medical experiences in India, Sangye Gyatso's description of the later Yuthog's stay there is limited to an accounting of the various texts he studied in each region he visited.[348]

The eleventh and twelfth centuries represented a period in which Tibetans struggled with their relationship to the environment. The land was built upon furiously throughout this period, dominated by monuments of human construction, and wide regions of land

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[347] According to Tucci, none of these medical students of Rinchen Zangpo are even mentioned in the *Blue Annals*' lists of his students; nor are they mentioned in the *Chos 'byung* of pad ma dkar po. Giuseppe Tucci, *Rin-chen-bzang-po and the Renaissance of Buddhism in Tibet around the Millenium*, ed. Lokesh Chandra, trans. Nancy Kipp Smith, Śata-Piṭaka Series, Indo-Asian Literatures, Volume 348 (New Delhi: Aditya Prakashan, 1988). See also *Pod kyi gso ba rig pa'i byung 'phel gyi lo rgyus gsal bar ston pa baidurya sngon po'i shun thigs*, 317-319.

[348] Sangs rgyas rgya mtsho, *Khog 'bugs*, 226-229.

were mapped out as the exclusive possession of particular religious communities. This land also spoke back to its inhabitants, as it were, offering forth an increasing number of important treasure texts. Germano explains that during this period, "Instead of imposing literal translations as supported by ordinary modes of study and composition, the treasure movement insists on extraordinary means of bringing texts into existence, and that these texts be produced, in some sense, by the landscape in which Tibetans live."[349]

I might speculate that newly developing attitudes toward geographical space during this period coincided with changing notions about the human body. If this period is characterized by the fervent creation of physical sites for religious activity, we might indeed count the human body as one of these sites, as tantric traditions located religious meaning in the body. Detailed organizational schemas in tantric and medical traditions mapped the body in a manner not unlike the mapping of the landscape. Anatomical or physiological representations of the human body identified key centers of dominating function within the bodily structure, contrasting these with peripheral functions, in a layout that resembles how religious centers were surrounded by peripheral temples and communities. Metaphors of building were widespread: they are used to describe a teacher's important disciples, as in the *Blue Annals,*

> gLan, rNgog, and sNa-nam, the three, and Gru-mer, the fourth are known as the 'Four Pillars' (*ka ba bzhi*)... The kalanyamitra kLu.. and Sum... the two, are known as the "Two Beams' (*gdung gnyis*). Khu and Ring, the two, were called the 'Southern door-bolt' (*lho'i sgo*

[349] David Germano, *The Secret Transformation of Buddhist Tantra in Ancient Tibet* (Charlottesville: unpublished manuscript, printed 12-14-97), 146.

glegs), and the 'Northern door bolt' (*byang gi sgo glegs*) respectively.[350]

Other important disciples were described as "rafts" (*phyam*), and "planks" (*gral bu dral bu*). The human body is described in the *Four Tantras* using architectural metaphors as well, as we saw in chapter three. Inside the structure of the body-as-castle, the organs are imaged as courtly inhabitants, with the heart as the king and the other important organs, his queens and attendants.

The concern with identity construction and self-validation that characterizes this period in Tibetan history thus billed geographical space as one of its key players. Whether texts were products of the Tibetan landscape or imported by travelers to foreign lands, the exact geographical source of a text was of great importance to its claim to authority. Just as individuals were inherently identified by their place of origins, the geographical origin of an important text was a key identifying feature of the text; just as an individual's travels comprised central biographical details about his or her life, the travels of a text across continents, or across local regions as it passed hands, was duly noted as a key feature of the text's identity. Geographic and geometric conceptualization—whether for individuals, texts, or internal organs—was thus an important form of self-identification and validation, and arguably it was often the most significant factor enabling a Tibetan notion of history in which history itself serves as validation of the present.

III. d. The genealogical construction of continuity

In the Buddhist way of thought, individual persons are tied to the past, and to the

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[350] *The Blue Annals*, trans. George N. Roerich (Delhi: Motilal Banarsidass, 1976), 74.

identities of other individuals, in various ways. As embryology teaches us, each individual is continuative with his or her own endless succession of past lives. Many are also part of a genealogy of personal reincarnations. In addition, they are also linked to their teachers, and their teachers' teachers, and ultimately to the very beginnings of time, lists of succession thereby legitimizing the present through the past in the most forceful way possible.

Tibetan communities articulated their identities in similar ways: while recognition of a geographic origin, or of a distinctive philosophical or theoretical doctrine, was part of this self-identification, also important was the naming of a select group of members organized genealogically. The various kinds of lineage seen in Tibetan literature—royal genealogies, monastic genealogies, divine genealogies, and so forth—each have their own socio-historical origins and particular characteristics. Tibetan historical and biographical literature, as exemplified by the *rgyal rabs, chos 'byung,* or *deb ther* genres, assigns necessary characteristics to the members of these groups, such that qualified members must have studied with certain teachers, mastered certain texts and doctrines, or traveled to certain places. This association of a particular set of personal and professional characteristics with each member of a genealogy serves not only to identify a given individual, but also to define the entire group to which the individual belongs.

Tibetan medical historical and biographical literature clearly adheres to this genealogical model of narrative self-identification. We saw that the two large schools of medical thought described above—the Jang and the Zur—are defined as continuing lineages deriving from founding teachers. I have mentioned also the lineage descending from the

twelfth-century Yuthog Yonten Gonpo and based on the *Eighteen Additional Practices.* There were other ways of distinguishing medical traditions during these centuries, such as the predominantly text-focused lineage system. On the upper cartouche of most of the Tibetan medical paintings commissioned by Sangye Gyatso in the seventeenth century, for example, there are depictions of lineage holders for several other important medical texts, such as the *Heart Essence of Yuthog,* the *Ten Million Relics* (*bye ba ring bsrel*), and Padmasambhava's *Vase of Nectar* (*bdud rtsi bum pa*).[351] Through transmission along a continuing lineage, the teachings are likened to endlessly reborn lives—like human beings themselves, the teachings are alive, and the qualities of continuity and eternity are valorized. Historiography meets embryology here too.

III. e. Historiography recapitulates embryology

Bjerken observes that one of the most conspicuous characteristics of Tibetan historical narrative is its vast temporal scope. Following an Indic cosmological model that views contemporary events from an ultimately cosmic perspective, Tibetan histories often "open in grand style from a cosmic vantage point to describe the structure of the universe, governed by cycles of time that oscillate between periods of destruction and renovation, between alternating phases of dissolution and manifestation."[352] Bjerken explains,

> Buddhist and Bon historians place their subjects within a cosmic temporal framework characterized by alternating periods of manifestation and dissolution, of light and darkness.

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[351] Meyer, "Introduction: The Medical Paintings of Tibet," 8.
[352] Bjerken, "Mirrorwork", 64.

> This cyclical pattern is endowed with moral meaning, for reality is identified with the social order, and historical events further establish that order. We are told the story of the vicissitudes of religion: its birth, growth, decline and rebirth.[353]

Bjerken thus demonstrates that the karmically driven, cyclic "moral-temporal structure" that is based on the evolutionary narratives of Buddhist cosmology and embryology are the very foundation for the plot of every Tibetan historical narrative.[354] Here again we see a fascinating recapitulation of embryonic growth in the very manner of recording history. We may recall an earlier discussion of the modeling of some embryologies, such as that of Longchenpa's *Treasury of Words and Meanings*, after the Buddhist cosmological paradigm in which the universe begins through alternating phases of destruction and creation. In chapter three I reported that in Longchenpa's model, for example, the embryo, just like the universe, is sequentially destroyed and reconstituted repeatedly during the first weeks of gestation. In chapter five, I explained how the patterns evident in various models of embryonic growth are intricately related to standards of religious order and causation. Now we see that the paradigm of embryology makes its impression on historiography as well.

Matthew Kapstein's research suggests that the correspondence of historical models of change with embryological models of change may itself have a polemic history to it in Tibet. In his book, *The Tibetan Assimilation of Buddhism*, he notes that Dunhuang documents provide evidence for the vigorous promotion of Buddhist teachings about karma and saṃsāra prior to the tenth century, implying that these teachings were somehow problematic to

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[353] Ibid., 46.
[354] Ibid., 65.

Tibetan audiences at the time.[355] Notions of time and causality promoted by the embryological paradigm, therefore, may have risen to prominence in the context of this royal period push to emphasize the Buddhist soteriological system. Kapstein writes,

> From the perspective of normative Buddhist doctrine, cosmology is thought of above all in terms of moral causation, involving, in traditional terms, the crucial teaching of rebirth. It is of some importance, then, that, beginning perhaps in the last half of the eighth century—that is, still during the reign of Trhi Songdetsen—we start to find evidence of the production of an indigenous Tibetan didactic literature whose primary aim is the propagation of the doctrines of rebirth and moral causation.[356]

Supporting views discussed earlier in this dissertation, Kapstein suggests further that there were political reasons for encouraging these Buddhist notions of change, noting that "the cosmology of karma and saṃsāra comported well with an imperial interest in legislation; that is to say, law and order may be reinforced by assenting to cosmic justice and order."[357] Subsequently, then, in the centuries to follow the royal period, the embryological paradigm may have remained a central means for expressing notions of change, time, and identity, thereby defining also the historiographical method.

IV. Constructing identities

Zeff Bjerken suggests that the purpose of the Buddhist historical narrative is typically "to entertain and edify the faithful, and to establish the authenticity of the writer's own

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[355] Matthew T. Kapstein, *The Tibetan Assimilation of Buddhism: Conversion, Contestation, and Memory* (New York: Oxford University Press, 2000), 34.
[356] Ibid., 44.
[357] Ibid., 54.

lineage and tradition."[358] Concerned ultimately with gaining moral authority and legitimacy, he explains, Tibetan religious historians "ethicize" the events they describe. As in other genres of Tibetan scholarship, a central means of ensuring this legitimacy is adherence to the words of earlier masters—many histories thus appear to be little more than a patchwork of citations from authoritative texts. Whereas historians today may prioritize the generation of insightful analyses based on "original" source materials, Bjerken suggests that Tibetan histories, by contrast, were "true" when they accurately reflected the wisdom of consensus.[359] This is not to say, of course, that these historians had nothing of their own to add, but rather that their approach was rhetorically framed as the transmission of authorized tradition, their task being "merely" the filling in of whatever information may have been lacking.

While I agree with Bjerken's problematization of the application of contemporary, Euro-American historiographical truth standards to Tibetan histories, I would suggest that there is more creativity involved in Tibetan historiography than Bjerken allows. Histories offer various types of information. Although many readers will mine a historical text only for the details it may offer about events that really happened and people that really existed, on a more subtle level these texts can also provide a view of how authors and narrators chose to portray time, change, and identity. Just as it would be of limited value to read embryological narratives only for information on how embryos grow, there is, in the same way, much more to be understood from a historical narrative than simply what events occurred. The very brief overview of Tibetan medical historiography in this concluding digression is meant to

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[358] Bjerken, "Mirrorwork", 5.

[359] For a cogent discussion of the identification of this practice as "plagiarism," see Ibid., 50-53.

demonstrate that reading histories—like embryologies—as narratives illuminates a wealth of information about Tibetan culture, history, and belief. Notions of ethics, causality, and identity shape the creative construction of social history just as they do the creative construction of personal history, as the stories of embryogeny have told us. Embryological and historical narratives alike are concerned with explaining discontinuity as continuity, and with making whole selves out of fragments. Asking how we can account for discontinuity, they are centrally about change: how it happens, why it happens, and how it should happen, were we able to gain control of the process. These narratives are also about the creation of bodies: a personal, material body in the case of a human individual, and a public, social body in the case of a tradition. Indeed, in two important contexts in which one might talk about identity—namely the contexts in which we describe the growth of the human being (embryology) and the growth of the social being (history)—this dissertation argues that Tibetan writers feel an impulse toward the use of the narrative form.

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