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Articles

Megan Bryson	
Mahākāla worship in the Dali kingdom (937–1253) $-A$ study of the Dahei tianshen daochang yi	3
Thomas Cruijsen, Arlo Griffiths, Marijke J. Klokke	
The cult of the Buddhist dhāraṇī deity Mahāpratisarā along the Maritime Silk Route: New epigraphical and iconographic evidence from the Indonesian Archipelago	71
Roderick Orlina	
Epigraphical evidence for the cult of Mahāpratisarā in the Philippines	159
Vincent Eltschinger	
Aśvaghoṣa and his canonical sources II – Yaśas, the Kāśyapa brothers and the Buddha's arrival in Rājagṛha (Buddhacarita 16.3–71)	171
Paul K. Nietupski	
Atha niryāṇavṛttam: Reflections on the first sūtra and the opening passages of Guṇaprabha's Vinayasūtra and Autocommentary — With reference to Indian and Tibetan commentaries	225
Reiko Ohnuma	
An elephant good to think – The Buddha in Pārileyyaka for-	250

2 Contents

Jin Y. Park	
A Huayanist reading of the Lotus Sūtra – The case of Li Tong- xuan	. 295
Barbara Gerke	
'Treating the aged' and 'Maintaining health' – Locating boud len practices in the four Tibetan medical tantras	329
Eviatar Shulman	
The Aṭṭhakavagga as Buddhist poetry	363
Chizuko Yoshimizu	
Reasoning-for-others in Candrakīrti's Madhyamaka thought	413
•	
Notes on the contributors	445

'Treating the aged' and 'Maintaining health'

Locating *bcud len* practices in the four Tibetan medical tantras¹

rang sdug rang gis myong ba rde'u bcud len
You are the creator of your own suffering by taking
essence extractions from pebbles.

Tibetan proverb

Barbara Gerke

Introduction

There are numerous instances in secondary literature on Tibetan medicine, or *Sowa Rigpa* (*gso ba rig pa*),² alluding to certain 'longevity practices' and the use of Tibetan medicine for revitalisation and anti-aging. Some of these refer to the core classical Tibetan medical compendium known as the *Four Tantras* (*rgyud bzhi*)³ as their main source and mention so-called "essence extraction" or *bcud len* practices, said to rejuvenate, prevent ageing, and support spiritual realisation. As the above proverb suggests, *bcud len* practices can be rather unpleasant and difficult, since they typically in-

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² Sowa Rigpa (lit. "the science of healing") is a term increasingly used for Tibetan medicine today, also in the context of its Indian recognition under AYUSH.

³ Tibetan terms are presented in Wylie transliteration (Wylie 1959).

volve long periods of fasting, during which one lives on a few pills a day made from the extracts of stones (e.g. pebbles), flowers, minerals, or other material or immaterial substances. They can even be harmful if not carried out properly and under the guidance of an experienced teacher.

The term *bcud len* has been translated as "elixir" or as "elixir of rejuvenation." Some *bcud len* are indeed elixirs. Such elixirs are mentioned in Tibetan medical texts in the form of pills, liquid decoctions, extracts, or liquors. However, the meaning of the term *bcud len* is much broader, considering that a *bcud len* can also be an essence extracted from outer elements and Buddha fields by means of visualisation. Therefore, I largely prefer the term "essence extraction" since it reflects the most significant idea of a *bcud len*: that vital essences can be extracted from various substances, either pharmacologically or meditatively, for the purpose of promoting longevity. In this article, I use the terms *bcud len* and essence extraction interchangeably and the term elixir only in the context of certain rejuvenating products made from substances of which some are rich in *bcud*.6

Even though we are aware of the existence of *bcud len* practices in a variety of contexts,⁷ we do not know much about where exactly and in what way *bcud len* practices are presented in Tibetan medical texts.⁸ The *Four Tantras* with its 156 chapters and 5,900 verses,

⁴ Emmerick 1990: 89.

⁵ Parfionovitch, Dorje, Meyer 1992: 119.

⁶ *Bcud* has many meanings and can be translated as taste, essence, elixir, sap, moisture, potency, nutrition, extraction, good substance, essential aspects, nutriment, nutritious, vital essence, quintessence, distillation, distilled essence, or a drink (THL 2010).

 $^{^{7}}$ Garrett 2009, 2010; Gerke 2012b; Germano 1997; Mei 2010; Oliphant, forthcoming.

⁸ The exception here is Emmerick 1990, who contributed the first English translation of the *bcud len* chapter of the *Four Tantras*. He also annotated the translation with some notes, pointing out lexical problems in various editions of the *Four Tantras* as well as parallel passages in the *Aṣṭāṅgaḥṛdayasaṃhitā* by Vāgbhata and the *Siddhasāra* by Ravigupta (Emmerick 1990: 92–99).

dating back to the twelfth century CE or even earlier, 9 is a good point to start such an analysis, since it is the most influential medical text among most Tibetan doctors to this day, and a majority of chapters are still memorised as an integral part of medical education. This paper presents a preliminary study of the bcud len practices mentioned in the Four Tantras and analyses their preventive, remedial, and rejuvenating character and also discusses the classification of those bcud len ingredients that are used in elixirs and meditative consecration practices. Relevant comments from the popular seventeenth century commentary Blue Beryl (Baidūrya sngon po) by Desi Sangye Gyatso are included. 10 This does not mean that bcud len practices are limited to these two texts. However, the material presented here can be considered representative of the kind of Tibetan medicine centred on the Four Tantras and more institutionalised forms of medical knowledge that emerged in Central Tibet around the time of the Fifth Dalai Lama and Desi Sangye Gyatso.¹¹ We should keep in mind that there remains a large heterogeneous corpus of Tibetan medical and Buddhist literature with a variety of bcud len practices that still await scholarly attention.¹²

I look at *bcud len* substances in the *Four Tantras* with the following question in mind: what makes them rich in "essence" (*bcud*) that then can be "extracted" (*len pa*) and made available to humans to support health and physical vitality and prevent premature ageing? In doing so, I will highlight that *bcud len* substances and practices in the *Four Tantras* are not only used for invigorating the aged and rejuvenating the middle-aged, but are also considered disease-preventive as part of maintaining 'normal health.'

The famous "eight branches" (Tib. *yan lag brgyad*, Skt. *aṣṭāṅgahṛdaya*) have long been known as a fundamental framework of medical classification in both Indian and Tibetan traditions. Two of these "eight branches" deal with important aspects

⁹ The sources of the *Four Tantras* have been analysed by Czaja (2005 / 2006), Emmerick (1977), Karmay (1989), and Yang Ga (2010 and in press).

¹⁰ Sangye Gyatso 1982.

¹¹ See, for example, Schaeffer 2003.

¹² See, for example, Oliphant, forthcoming.

of vitality: the seventh branch of "healing the aged" (*rgas pa gso ba*), which includes essence extraction practices (Tib. *bcud len*, Skt. *rasāyana*),¹³ and the eighth branch on "restoring virility" (Tib. *ro tsa bar bya ba*,¹⁴ Skt. *vājīkaraṇa*). Besides describing the compounding of elixirs and tonics, in most Indian alchemical traditions the term *rasāyana* also refers to the transmutation of metals into gold.¹⁵ When this knowledge reached Tibet, it was integrated into tantric and medical *bcud len* texts as well as into texts on metallurgy (*gser 'gyur*).

The "eight branches" appear in the famous ayurvedic compendium by Vāgbhaṭa (7th CE), the *Aṣṭāṅgahṛdayasaṃhitā*,¹6 which was translated into Tibetan in the eleventh century¹7 and was likely an important source for the compilation of the *Four Tantras*,¹8 but by far not the only one.¹9 The Tibetan translation of the *Aṣṭāṅgahṛdayasaṃhitā* had a considerable influence on medical texts until the *Four Tantras* took prominence during the course of the thirteenth century.²0 Both, the *Aṣṭāṅgahṛdayasaṃhitā* and the *Four Tantras* cover the "eight branches," albeit in different chapters. Both texts have chapters on essence extractions and on the restoration of virility.

¹³ Rasa means taste, essence, and also mercury; āyana means path.

 $^{^{14}}$ Ro is the Tibetan term for the Sanskrit rasa; tsa is a translation of the Sanskrit particle ca; ro tsa is commonly translated as "virility," and ro tsa sman are "aphrodisiacs."

¹⁵ Walter 1979: 319.

¹⁶ The *Aṣṭāṅgaḥṛdayasaṃhitā* is available in Sanskrit (Emmerick and Das 1998), Tibetan (Vāgbhaṭa 2004), German (Hilgenberg and Kirfel 1941), English (Murthy 1996), and in several other Indian languages.

¹⁷ Vāgbhata 2004.

¹⁸ Emmerick 1977; Karmay 1989, 1998.

¹⁹ Yang Ga argues that only "about one quarter of the *Explanatory Tantra*, about seven percent of *Oral Instruction Tantra*, and three percent of the *Final Tantra* are directly or indirectly derived from *The Heart of Medicine*," i.e. the *Aṣṭāngahṛdayasaṃhitā* (Yang Ga, in press).

²⁰ Martin 2007: 312.

The fact that essence extractions and virility practices were included in the "eight branches" shows that they were given an important status in medicine next to the other branches, which are "the body" (*lus*), "children's diseases" (*byi ba*), "women's diseases" (*mo nad*), "disorders caused by evil spirits" (*gdon*), "the treatment of injuries caused by weapons" (*mtshon rma*), and "poisoning" (*dug*). Essence extractions are discussed in the chapter on "healing the aged," which is chapter 90 of the third tantra of the *Four Tantras*, known as the "Oral Instruction Tantra" (*man ngag rgyud*). Topics of fertility and semen production appear in the eighth branch under "restoring virility" (*ro tsa bar bya ba*) in chapters 91 and 92 of the same tantra.²¹ The *Aṣṭāṅgahṛdayasaṃhitā*, which has six sections and 120 chapters, covers these two branches in two chapters of the "Last Section" (Skt. *Uttarasthāna*): chapter 39 on elixirs and chapter 40 on aphrodisiacs.²²

The bcud len recipes of the respective chapters of the Aṣṭāṅgahṛdayasaṃhitā and the Four Tantras differ markedly for reasons still to be researched. One reason might be the different materia medica found in Indian and Tibetan environments. A first parallel reading reveals that only a few paragraphs were translated literally from the Aṣṭāṅgahṛdayasaṃhitā and included in chapter 90. We know that Vāgbhaṭa's Aṣṭāṅgahṛdayasaṃhitā "probably represents one of the principal sources of 'external' alchemical material in the Indo-Tibetan medical tradition;"²³ overall, the Aṣṭāṅgahṛdayasaṃhitā lists many more rasāyana ingredients and recipes than chapter 90 of the Four Tantras. However, the Four Tantras also contains bcud len recipes and consecration rituals that are not mentioned in the Aṣṭāṅgahṛdayasaṃhitā. A detailed comparison between these two chapters would require a separate study,

²¹ Chapters 91 and 92 on virility and infertility are titled "restoring [male] virility" (*ro tsa bar bya ba*) and "seeking a woman" (*bu med btsal ba*), which refers to the treatment of infertility in women. Brief summaries of all these chapters are found in the commentaries on the medical paintings (Parfionovitch, Dorje, Meyer 1992: 121), which are based on the *Blue Beryl* (Sangye Gyatso 1982).

²² Hilgenberg and Kirfel 1941: 710–36.

²³ Samuel 2010: 226–27.

but I will refer to some parallels and differences in the course of this article.

One important point to note is that bcud len have been mentioned in Tibetan medical texts before the Astāngahrdayasamhitā was translated into Tibetan. For example, the pre-eleventh century Tibetan medical text King of the Moon (Zla ba'i rgyal po)²⁴ has a short chapter on "essence extractions of bitumen" (brag zhun bcud len),25 which lists various simple mixtures of bitumen for specific diseases.²⁶ The contemporary Tibetan physician and Harvardtrained researcher Yang Ga argues that the King of the Moon was a Tibetan composition, written before ayurvedic texts were translated into Tibetan. He found no evidence of the Astāngahrdayasamhitā having influenced this text.²⁷ The mention of bitumen bcud len in the King of the Moon would indicate that some form of bcud len preparations were known before the ayurvedic rasāyana material was translated into Tibetan. However, only the title of the chapter designates bitumen as a bcud len and the text itself does not present bitumen as having any rejuvenating or life-prolonging properties.²⁸ This means either the meaning of the term *bcud len* at the time the King of the Moon was written had no association with longevity or rejuvenation, or the term bcud len might have been added retrospectively to the title by later editors. Further research is needed to clarify this observation.

²⁴ Hwa shang ma hA ya na and Bai ro tsa na 1994.

²⁵ Hwa shang ma hA ya na and Bai ro tsa na 1994: 142–43.

 $^{^{26}}$ Hwa shang ma hA ya na and Bai ro tsa na 1994: 142; Tashigang (ed.) 1989: 3, 177.

²⁷ Yang Ga, in press.

²⁸ To give an example, "As for the method of preparing bitumen: mixing it together with long pepper and sugar, cures all lung and heart disorders" (sbyar thabs brag zhun dag dang ni / pi pi ling dang ka ra sbyar / glo snying nad rnams zhi bar byed). See Hwa shang ma hA ya na and Bai ro tsa na 1994: 142.

The physiology of bcud len

Even though ingredients of rejuvenating essence extractions might differ in ayurvedic and Tibetan traditions, the underlying physiology of how these extractions work is based on similar concepts. In both traditions the revitalisation process induced by bcud len or rasāvana products is explained as affecting the body's nourishment through a specific digestive physiology. This kind of physiology is mainly understood in terms of the five elements earth, fire, water, air, and space (Tib. 'byung ba lnga; Skt. pañca mahābhūtāni), three basic physiological principles of the body (Tib. nyes pa; Skt. dosa),29 and seven bodily constituents (Tib. lus zungs bdun; Skt. dhātu).30 Essentially, in both Āyurveda and Tibetan medicine, vitality and vigour are a matter of good digestion, since metabolising food into vital essences is largely ruled by the transformative power of the digestive fire (Tib. me drod; Skt. agni). 31 Already Caraka's Compendium, the Carakasamhitā (composed between around 100 BCE and 200 CE) mentions that the main aim of an elixir or rejuvenating tonic is to nourish the seven bodily substances.³² In the Aṣṭāngahṛdayasamhitā this is explained as creating good "chyle" (Skt. rasa),33 which is the first of the seven dhātu and the basis

²⁹ The three dosa of Indian physiology and cosmology are $v\bar{a}ta$, pitta, and kapha. In Tibetan these three nyes pa are called rlung ("wind"), mkhris pa ("bile"), and bad kan ("phlegm"). Their English renderings – wind, bile, and phlegm – while apt, cannot be taken literally (see, for example, Gyatso Y. 2005/2006, and Gerke 2010 for a discussion on these translation issues). For those unfamiliar with the three nyes pa: rlung is governed by the element 'air' and is responsible for all movements in the body; mkhris pa has the nature of 'fire' and rules metabolic processes; and bad kan is governed by 'water' and 'earth,' and binds substances in the body together.

³⁰ These seven bodily constituents are nutritional essence (*dangs ma*), blood (*khrag*), flesh (*sha*), fat (*tshil*), bone (*rus*), bone marrow (*rkang*), and regenerative fluids (*khu ba*). Their transformation from one essence into the other is explained in detail, for example, by Sangye Gyatso 1982: 120.

³¹ See, for example, Alter 1999, and Gerke 2012a: 162ff. for details on this digestive process.

³² Newton 2001: 162.

³³ Hilgenberg and Kirfel 1941: 710.

for the formation of the other $dh\bar{a}tu$ – blood, flesh, fat, bone, bone marrow, and the regenerative reproductive fluid, which are all in a way 'essence extractions,' since the latter is always built from the essence of the former. The Tibetan term dangs indicates the goodness one can receive from material substances, such as food,³⁴ but as a technical medical term it also refers to the first of the seven bodily substances, "chyle." The final product of the digestive distillation process is called mdangs (Skt. ojas), which is a vital essence that is visible in a person's radiance and complexion. Both dangs and mdangs, along with the other bodily substances, are part of the physiology of how a bcud len works.

Contemporary Indian studies on *rasāyana* have 'translated' such *rasāyana* properties as "immunity and resistance stimulating" or "antioxidant activity." Numerous ayurvedic *rasāyana* plants have been chemically analysed, tested, and the results published. Such publications have given ayurvedic rejuvenation therapies a place among evidence-based alternative and complementary medicines in the West, but there have also been critics of the potentially toxic ingredients used in *rasāyana* products. Contemporary Tibetan *bcud len* products sold in the form of tonics and supplements do not contain metals and toxic substances as ingredients, but have to date not been chemically analysed.

Regarding the use of metals in rejuvenatory tonics (*rasāyana*), the *Aṣṭāṅgahṛdayasaṃhitā* (*Uttarasthāna* 39.161) mentions mercury (*pārada*) as an ingredient for an elixir, which is apparently "the first recipe for the internal use of mercury" in Sanskrit medical literature.³⁹ Mercury, although mentioned in the *Four Tantras* in the context of medicinal ashes, precious medicines, and the treatment of poisoning, is not found as an ingredient in the *bcud len* recipes

³⁴ THL 2010.

³⁵ Newton 2001.

³⁶ For example, Govindarajan et al. 2005; Scartezzini and Speroni 2000.

³⁷ For example, Joshi and Parle 2006.

³⁸ For example, Ernst 2002; Kales, Christophi, and Saper 2007; Koch et al. 2011; Saper et al. 2008.

³⁹ Wujastyk, in press.

discussed in the two chapters presented here. Only "iron stone" (*lcags rdo*) and bitumen from iron-containing rocks (*lcags zhun*) are listed among metal-containing *bcud len* ingredients, and there is only one bitumen recipe that suggests mixing gold, silver, copper, and iron with milk (see section on bitumen further below). The mixing of metals into this particular *bcud len* has been adopted from the *Astāṅgahrdayasamhitā*.⁴⁰

To further understand the working of *bcud len* for the aged, the next section looks at Tibetan medical ideas concerning ageing and the benefits of taking essence extractions as explained in the *Four Tantras*.

Reasons for ageing and benefits of bcud len

The primary cause of aging is mentioned, both in the *Four Tantras* and in Sangye Gyatso's commentary, as the transformation of the five elements; the passing of years, physical exhaustion, and mental stress are the secondary causes.⁴¹ The reduction of the digestive heat (me drod) is also seen as a causal factor to contribute to the accumulation of 'bad blood' and undigested, disease-causing substances in the body. Ageing is seen as a natural, inevitable process of life that takes place throughout the different stages of an 'optimal life span.' Chapter 16 of the second tantra or "Explanatory Tantra" (bshad pa'i rgyud) affirms that regularly eating fat (snum) can extend the life span to one hundred years.⁴² This might not be meant literally, but figuratively, as an expression for a very long life. Life passes through the life-cycles of childhood, youth, and old age. Each of these periods is intrinsically related to the three nyes pa and the aging process, visible through the changing predominance of the three nyes pa in certain stages of life: bad kan is dominant during childhood (until sixteen years), mkhris pa during

⁴⁰ *Uttarasthāna* 39. 141. Hilgenberg and Kirfel 1941: 723. See also Emmerick 1990: 95, note 16.

⁴¹ Yönten Gonpo 1982: 81; Sangye Gyatso 1982: 362 and 1135.

⁴² Yönten Gonpo 1982: 56; Ploberger 2012: 239. The *Aṣṭāngahṛdayasaṃhitā* promises a life span of five hundred years in the *rasāyana* chapter (Hilgenberg and Kirfel 1941: 726).

adulthood, and *rlung* during old age (above seventy years). Thus older people are more receptive to *rlung* imbalances. Some *bcud len* recipes take these *nyes pa* sensibilities into account by adding certain substances to counteract potential imbalances, as explained later in this paper. This link to Tibetan medical epistemologies of the three *nyes pa* is not exclusively found in medical texts but also appears in meditative *bcud len* recipes, despite their generally more religious focus. This illustrates the fact that the knowledge of the three *nyes pa* was also taken into account by Buddhist masters. The text on making *bcud len* from flowers by the Second Dalai Lama, Gendun Gyatso (*dge 'dun rgya mtsho*; 1475–1542), advises the practitioners to collect different types of flowers according to their *nyes pa* imbalance, for example, rhododendron flowers (*ba lu'i me tog*) for a *bad kan* imbalance.

Neither in Tibetan medicine nor in Tibetan Buddhism are anti-aging practices determined by ideas of physical immortality, as is the case in some Daoist traditions.⁴⁵ Autobiographical accounts of senior Buddhist masters⁴⁶ present no obvious intention of achieving physical immortality through *bcud len* or Buddhist longevity practice, but a great concern about the depletion of the body and, along with numerous incapacities, the loss of opportunities for spiritual practice. Therefore, contemplative longevity practices – which regularly include the taking of *bcud len*⁴⁷ – are often performed with the aim of creating 'obstacle-free time' to continue meditation practices.⁴⁸ However, in the medical context the main aim of *bcud len* practices is to restore physical strength and prolong life up to the maximum life span.

Who is the actual target group of these *bcud len* practices mentioned in the *Four Tantras*? The *Four Tantras* explicitly states that

⁴³ Yönten Gonpo 1982, 25–29, chapter 5, second tantra.

⁴⁴ Gyalwa Gendun Gyatso and Tsepak Rigzin 1982: 88.

⁴⁵ Kohn 1990.

⁴⁶ For example, Kongtrul and Barron 2003.

⁴⁷ Doelter 1983; Yeshe 2010.

⁴⁸ See, for example, Gerke 2012a: 108, 233.

rejuvenation is of benefit to the "middle aged" (*dar ma*) or the "not very aged." Taking essence extractions can place "one who has old age in the prime of life," but does not work "in the case of the diseases of the elderly whose life span is exhausted" (*tshe zad rgas pa'i nad las bsring ba yi*). ⁵⁰ There seems to be a clearly articulated limit to the efficacy of treating the elderly with *bcud len*. The reasons for this are found in Tibetan concepts of the life span (*tshe*), which is often compared with the oil in an oil-lamp that can run out but can also be refilled, which opens the possibility of actively managing one's life span to a certain extent, until either the maximum life span has been reached or, due to karma, *tshe* has been irreversibly exhausted. ⁵¹

In the *Four Tantras*, the promises of the benefits of taking *bcud len* are nevertheless remarkable: long life, enhanced body complexion, clear sense organs, a sharp mind, a melodious voice, and virility.⁵² From this list of benefits we see that ideas of virility and revitalisation are interlinked, which is common in Asian medical systems. White points out that "the near identification with longevity and virility is a fundamental one in India, linking together the bodily process of digestion, production and retention, conception, and reproduction."⁵³ In another paper, I discuss how longevity and virility are also related in contemporary interpretations of *bcud len* as supplements, which are often advertised emphasising their aphrodisiac effects, utilising contemporary Western concepts of 'rejuvenation.'⁵⁴

In the *Four Tantras*, *bcud len* practices are mentioned only in two chapters: in chapter 23 of the second tantra titled "Normal

⁴⁹ Yönten Gonpo 1982: 548.

⁵⁰ Yönten Gonpo 1982: 548–49; Emmerick 1990: 89. The *Aṣṭāṅgahṛdayasaṃhitā* addresses young and middle-aged people (Hilgenberg and Kirfel 1941: 710).

⁵¹ I discuss Tibetan concepts of the life span in my recent monograph (Gerke 2012a)

⁵² Yönten Gonpo 1982: 548; Emmerick 1990: 89.

⁵³ White 1996: 26.

⁵⁴ Gerke 2012b.

Health" (nad med tha mal gnas, lit. "remaining in a normal state without disease") and in chapter 90 of the third tantra, titled "The treatment of the aged with essence extractions" (rgas pa gso ba'i bcud len). In the remaining part of the paper both chapters will be analysed in more detail.

Maintaining health with bcud len (chapter 23)

The first instance where *bcud len* is mentioned in the *Four Tantras* is in chapter 23.⁵⁵ This chapter begins with a shorter version of the material found in the first section of chapter 90, introducing the four parts of *bcud len* practice, namely (1) the benefits, (2) the suitable place, (3) physical condition, and (4) methods of treatment. The first part, benefits, has already been presented above. In the second part, the suitable place for a *bcud len* retreat is described. Accordingly, the place where one purifies the body and fasts should be "clean, quiet, pleasant, and free of obstacles" (*gnas gtsang dben dga' bar chad med pa der*),⁵⁶ a place Sangye Gyatso further describes as "inaccessible for snakes, women, and stupid people" (*sbrul bud med glen pas mi bgrod par*).⁵⁷

The third part refers to the physical condition of a person undergoing *bcud len* practices, which I discussed above when explaining the target group (i.e. middle-aged people). In addition, sexual abstinence is considered essential during *bcud len* practices, ⁵⁸ as well as the effort to align oneself with good planetary constellations (*brtson pas gza' skar bzang dus 'jug*). ⁵⁹ The fourth part, "method of treatment," distinguishes between those who practise *bcud len*

⁵⁵ For the Tibetan versions see Yönten Gonpo 1982: 80–82; for English translations see Clark 1995: 193–95, and Men-Tsee-Khang 2008: 241–45.

⁵⁶ Yönten Gonpo 1982: 81.

⁵⁷ Sangye Gyatso (1982: 1135) quotes the *Zla ser* here. I suppose this is the *Yan lag brgyad pa'i snying po'i rnam 'grel tshig don zla zer*, the Tibetan translation of the *Padārthacandrikā*, the commentary of the *Aṣṭāngahṛdayasaṃhitā* by Candranandana (*zla ba mngon dga'*). See Yang Ga, in press.

⁵⁸ Sexual abstinence here is not to be confused with the sexual union visualisation practices that can be a part of such retreats.

⁵⁹ Yönten Gonpo 1982: 81.

regularly and those who take it "in addition" (*zhar la spyad pa*) to a normal diet, which is explained further below.

Why are bcud len practices considered a part of maintaining 'normal health'? Chapter 23 argues that the aim of 'normal health' is not only "to remain free from disease" (mi na gnas) but also "to live a long life" (ring du 'tsho bar bya).60 This shows that, at least textually, medical longevity practices do not belong exclusively to geriatrics, but are a part of regular health maintenance and thus have a strong preventative emphasis. They are, however, time-consuming. According to the Four Tantras, bcud len retreats take three or six months, or even one year to show an effect.⁶¹ The length of these practice schemes perhaps explains the distinction between those who take up the practice on a regular basis (gtso bor blangs) and those who use bcud len in addition,62 something that contemporary Tibetan physicians interpret as taking a vitalising supplement in addition to a normal diet.⁶³ The supplement option is not further discussed in chapter 23 and also not mentioned in chapter 90. However, Sangye Gyatso in his commentary of chapter 23 briefly mentions that medicinal butter (sman mar) can be taken in the morning in addition to a normal diet as an alternative to bcud len. 64 The idea of taking bcud len as a supplement has become more prominent in contemporary Tibetan medical practice, one reason being the lack of time, finances, self-discipline, and commitment to undergo long bcud len retreats; another reason is the great marketability of such bcud len products.65

Chapter 23 of the *Four Tantras* then goes on to describe the preliminary purification practices, which are repeated in chapter 90, listing the same ingredients. Both chapters state that it would be "as meaningless as dying something dirty" to practise *bcud len*

⁶⁰ Yönten Gonpo 1982: 80.

⁶¹ Yönten Gonpo 1982: 81.

⁶² Yönten Gonpo 1982: 81; Sangye Gyatso 1982: 362.

⁶³ Gerke 2012b: 198.

⁶⁴ Sangye Gyatso 1982: 363.

⁶⁵ Gerke 2012b: 198-99.

"without purifying" the body beforehand (ma sbyangs dri bcas tshos ltar don med 'gyur). 66 Purification of the body is achieved through oil therapy (snum 'chos), 67 followed by a bath and a purgative made from the three myrobalan fruits ('bras bu gsum), sea salt (rgyam tsha), long pepper (pi pi ling), wild ginger (bca' sga), sweet flag (shu dag), turmeric (yung ba), embelia (byi tang ga), molasses (bu ram), and cow's urine (ba chu). The chapter concludes with a set of well-known bcud len ingredients, which re-appear again in chapter 90 and will be discussed below. Note that this set of ingredients and their descriptions are taken almost verbatim from the Aṣṭāṅgahṛdayasaṃhitā, which strongly links these preliminary practices to ayurvedic ideas of body cleansing techniques.

Treating the aged with bcud len (chapter 90)

The main chapter on *bcud len* in the *Four Tantras* is clearly chapter 90 of the third tantra, which was translated into English by Emmerick.⁶⁸ The first part of this chapter introduces the four sections of the *bcud len* practice that are already mentioned in chapter 23. I will focus here on the general description of the main ingredients of certain essence extractions and their preparations and consecration methods, since they comprise the largest part of the chapter.

Chapter 90 presents nineteen *bcud len* recipes. A careful reading of this chapter has led me to group them loosely into four sets for the sake of presenting them in a more coherent fashion while keeping the original sequence in which they appear. First, I will summarise these sets briefly, then explain them in more detail. (1) The first set of *bcud len* introduces seven recipes with four key ingredients considered rich in *bcud*: white garlic (*sgog skya*), mineral exudates/bitumen (*brag zhun*), Ceylon leadwort (*tsi tra ka*),

⁶⁶ Yönten Gonpo 1982: 81.

⁶⁷ Such oil therapies are explained in chapter 13 of the fourth tantra (*phyi ma'i rgyud*), and involve induced vomiting and a colon cleansing with the help of oily substances (Yönten Gonpo 1982: 608–10; Men-Tsee-Khang 2011: 145–50).

⁶⁸ Emmerick 1990.

and the three myrobalan fruits ('bras bu gsum). Usually these ingredients require additional substances or 'carriers' for ingestion, such as ghee (clarified butter), cow's urine, milk, or honey. (2) The second introduces the "five essences" (dangs ma lnga) and "four nectars" (rtsi bzhi). One can either take the juice made from these nine ingredients or prepare them following two detailed recipes, which are linked to Buddhist meditation techniques for consecration, something that is strongly emphasised by Sangye Gyatso in his commentary of this chapter. (3) The third set presents seven recipes with five bcud len ingredients that are classified according to the sources from which they are to be extracted (roots, flowers, 'lightness,' stones, and nectars). (4) The chapter ends with two unassuming bcud len recipes that do not fit into any of the above sets but were included into the chapter for unknown reasons. Only the "four nectar" and "five essence" recipes contain details on measurements and manufacturing methods. The other recipes are either simpler or incomplete in their description. To manufacture most of them would require additional commentaries and the oral instructions of a teacher, which is customary for the dissemination of medical and pharmacological knowledge among Tibetans.

In the following, these four sets of *bcud len* recipes are presented in more detail.

Set 1: Key ingredients of bcud len recipes

The first set of *bcud len* substances (garlic, bitumen, leadwort, and myrobalan) are considered especially rich in *bcud*. The way they are described in the *Four Tantras* follows the same sequence as in the *Aṣṭāṅgaḥṛdayasaṃhitā*.⁶⁹ The ingredients are only briefly mentioned in the *Four Tantras*, but Sangye Gyatso's commentary offers more details quoting from a text titled *Eight Branches* (*snying po bsdus pa*),⁷⁰ which refers to the Tibetan translation of the *Aṣṭāṅgaḥṛdayasaṃhitā*. This supports my understanding that the

⁶⁹ Hilgenberg and Kirfel 1941: 721–24.

⁷⁰ I use the English title *Eight Branches* here because *snying po bsdus pa* is the short title of *yan lag brgyad pa'i snying po bsdus pa*. See Vāgbhata 2004.

Tibetan medical *bcud len* ingredients of this first set have a significant link to Indian *rasāyana* material. Some of the additional ingredients in the Tibetan version of these recipes have been substituted with substances that were locally available in Tibet. For example, where the *Aṣṭāṅgahṛdayasaṃhitā* recommends rice porridge, the *Four Tantras* mentions yoghurt or barley.

Now follows a brief discussion of these four ingredients of the first set of *bcud len* recipes from chapter 90.

Garlic

In the Four Tantras, garlic (sgog pa) is considered the supreme essence extraction (bcud kyi len mchog) because it is said to be "the blood of the Asuras" or demigods (lha min khrag). Sangye Gyatso tells us the legend based on the Eight Branches. The story goes that while the throat of the Asura king Rāhu was cut in order to steal its nectar, a drop of blood fell down on earth and turned into garlic. Therefore, Brahmins do not take garlic (it is one of the 'impure foods' in Hinduism). In Tibetan medical texts, garlic is considered rich in bcud since its nectar qualities reach back in history and once were part of the body of a demigod.⁷¹ In order to extract these semi-divine qualities, the garlic is soaked in liquor for twenty-four hours. The strained liquid is drunk after mixing it with sesame oil (til mar) and the thin watery surface layer of natural yoghurt (zho'i kha chu). In another recipe, white garlic (sgog skya) is boiled, ground, and mixed with clarified butter, then placed into a container with barley. If it is kept for twenty-one days, it is then taken for twenty-one days. If it is kept for three days, it should be taken only over three days.⁷² Here, the duration of the preparation process directly translates into the time period of consuming the remedy, a method typically found in Tibetan pharmacology. It is also stated that essence extractions from garlic are especially long-life promoting for individuals with a predominance of rlung.⁷³

⁷¹ Sangye Gyatso 1982: 1135–36.

⁷² Sangye Gyatso 1982: 1136.

⁷³ Yönten Gonpo, 1982: 549.

Bitumen

Black bitumen is known in Tibetan as brag zhun mdog nag and is a mineral exudate that is excreted by various rocks that 'sweat' in the hot sun.74 Depending on which mineral or metal content is found in the rock (e.g. gold, silver, copper, iron, and lead), the qualities of the dripping liquid resin-like substances vary, and they are used in different medications. Sangve Gyatso, again quoting the Eight Branches, maintains that the bitumen coming from iron-containing rocks (*lcags zhun*) is considered the best *bcud len*, because it is sour, bitter, and astringent in taste and of oily, smooth, and heavy quality (nus pa). Moreover it has the smell of cow's urine, is pitchblack, and looks like frankingense (gu gul), but has no sediments. Most of the other types of bitumen he considers too hot in nature and cautions that they might cause fever after digestion. Bitumen is often taken with milk. Other metals (gold, silver, copper, and iron) can be added if calcined (bsregs), but Sangye Gyatso advises that this should be done according to the cold or hot nature of the patient's illness. 75 Nowadays, bitumen – sold under the Sanskrit name shilajit – is a popular tonic both in ayurvedic and Tibetan medicine. For example, it is sold as a single-ingredient bcud len in Nepal;⁷⁶ it is also marketed by large Indian ayurvedic manufacturers, such as Dabur.⁷⁷ According to chapter 90, essence extractions from bitumen bring long life to individuals "having much heat" (tsha shas can), i.e. too much mkhris pa.⁷⁸

⁷⁴ See Phuntsog 2006: 152–58 on the medicinal use of bitumen. The Institute for Traditional Medicine Services in Bhutan published a study on anti-microbial and anti-oxidant properties of Bhutanese *brag zhun* (Wangchuk 2009).

⁷⁵ Sangye Gyatso 1982: 1136.

⁷⁶ http://www.purevisionsorig.org/shilajit-liquid-rock.html, last accessed 27-12-2013.

⁷⁷ http://www.dabur.com/Products-Consumer%20Health%20(OTC)-Shilajit%20Gold, last accessed 27-12-2013.

⁷⁸ Yönten Gonpo 1982: 549.

Leadwort

Again quoting the *Eight Branches*, Sangye Gyatso writes that an elixir of leadwort (*tsi tra ka*) taken for one month will lead to a life span of one hundred years without disease. Having warming properties which increase the digestive heat, leadwort is a good *bcud len*, especially for people suffering from cold *bad kan* disorders. There are several variations of this *bcud len*: it can be mixed with honey, ghee, sesame oil, urine, or buttermilk.⁷⁹

The Three Myrobalan Fruits

The three myrobalan fruits – chebulic (a ru), belleric (ba ru) and emblic myrobalan (skyu ru) – are all popular rasāyana ingredients of ayurvedic drugs and also well-known bcud len ingredients in Tibetan medicine. The three fruits are usually given in the form of medicinal butter (sman mar) and are considered a bcud len that targets both the primary cause of a disease as well as combined nyes pa disorders. 80 The three fruits can be given in combination with each of the substances mentioned above: when mixed with garlic they treat rlung disorders; with bitumen they treat blood and mkhris pa imbalances; with leadwort they are good for cold bad kan and chu ser⁸¹ disorders. ⁸² The myrobalan fruits seem to provide a base bcud len of balanced power and can therefore be a bcud len for all ages – for the young, middle-aged, and the aged. The myrobalan fruits are so versatile in their medicinal use that they are used both to detoxify the body prior to bcud len therapy as well as in the bcud len preparations themselves. The Astāngahrdayasamhitā lists many more bcud len recipes containing myrobalan, but these were

⁷⁹ Sangye Gyatso 1982: 1137.

⁸⁰ Sangye Gyatso 1982: 1138.

⁸¹ Chu ser (lit. "yellow water") is generally translated as "serum" or "lymph," but is based on a different physiology. Chu ser is the waste product of blood (khrag), which is refined in the gall bladder and eventually channelled throughout the body. It is red and light yellowish in colour and is primarily linked to skin and joints (Men-Tsee-Khang 2008: 18–19).

⁸² Sangye Gyatso 1982: 1138.

not included in the Four Tantras.83

Set 2: The "five essences" and "four nectars" as part of the "greater" and "lesser" bcud len practices

The second set of bcud len remedies are made from the five essences (dangs ma lnga) and four nectars (rtsi bzhi). It is said that when their juices are extracted and consumed, the body will escape the disease of old age and resemble the body of a sixteen-year old. These five essences and four nectars are also part of more complicated recipes than the ones mentioned so far in this chapter. Their processing methods have alchemical and tantric elements and are also linked to Buddhist meditation practices. Since the five essences and four nectars do not appear in the corresponding chapter of the Astāngahrdayasamhitā but in other Nyingma tantric literature,84 they are probably of non-ayurvedic origin.85 Their appearance across Tibetan medical and ritual contexts gives testimony to wide-spread nectar practices far beyond classical medical texts and point to the influence that Nyingma literature had on the compilation of the Four Tantras.86 They are also an expression of the popular and religious idea in Tibetan societies that vital essences can be extracted from the outer elements and made available for humans and animals to support health and physical vitality. Sangve Gyatso succinctly articulates this rationale when he writes, "...the pure parts (dangs ma) of the outer elements heal the inner elements."87 The term dangs ma here indicates a pure essence, i.e. the elements in their refined state, but the term can also refer to the first of the seven lus zungs and the goodness one can receive from material

⁸³ Hilgenberg and Kirfel 1941: 724–27.

⁸⁴ See Garrett 2010.

⁸⁵ The four nectars and five essences also appear in Vajrayāna longevity practices, such as the 'Chi med srog thig of the Dudjom tradition and in bcud len recipes attached to these ritual texts (Cantwell and Samuel, in press).

⁸⁶ Frances Garrett discusses such Buddhist nectar practices and their influence on Tibetan medical thought in more detail (Garrett 2010).

⁸⁷ ... phyi 'byung gi dangs mas nang 'byung gi gsos byed pa (Sangye Gyatso 1982: 1138).

substances, such as food.

The five essences (see table 1) are bitumen (*brag zhun*), calcite (*cong zhi*), molasses (*bu ram*), honey and white butter (*mar dkar*).⁸⁸ They carry the essential vitality of earth (*sa*), stones (*rdo*), wood/trees (*shing*), flowers (*me tog*), and roots/grass (*rtsa*) respectively and in turn restore the flesh (*sha*), bones (*rus*), physical strength (*stobs*), and radiance/lustre (*mdangs*), and also provide nutrition (*bcud*). These five essences were often the first substances mentioned when I asked Tibetan physicians in India about *bcud len*.⁸⁹ The reason for this might lie in the poetic nature of the text and the repetition of the word *dangs ma* ("essence") in each line, which makes it easier to memorise and remember this particular set of *bcud len*.⁹⁰

It is important to distinguish these five essences used in *bcud len* from the five nectars (*bdud rtsi lnga*) used in various types of nectar medicine (*bdud rtsi sman*) that are mentioned in Indian and Tibetan tantric yogic practices,⁹¹ even though there might be some parallel ideas of vitality-enhancing properties in all of them.

⁸⁸ The 'Chi med srog thig texts mention female yak butter ('bri mar). The idea behind its use is that the richness of the grasses the female yak consumes will be concentrated in her butter (Cantwell and Samuel, in press, chapter 5).

⁸⁹ Such interviews were part of the ethnographic aspects of my research on *bcud len* published in another paper (Gerke 2012b).

⁹⁰ rtsi bzhi dangs ma lnga yi bcud blangs pa / /sa yi dangs ma brag zhun sha yi gsos / /rdo yi dangs ma cong zhi rus pa'i gsos / /shing gi dangs ma bu ram stobs kyi gsos / /me tog dangs ma sbrang rtsi mdangs kyi gsos / /rtsa yi dangs ma mar dkar bcud kyi gsos / (Yönten Gonpo 1982: 549; Sangye Gyatso 1982: 1138). See table 1 for an English summary.

⁹¹ Garrett summarises this succinctly: "the five nectars are identified as human wastes or by-products: [1] human feces, [2] urine, [3] 'red *bodhicitta*' or (menstrual) blood, [4] 'white *bodhicitta*' or semen, and [5] flesh or marrow (*dri chen, dri chu, byang sems dmar po* or *rak ta, byang sems dkar po, sha chen* or *rkang mar*). The five nectars are typically paired with the 'five meats' (*sha lnga*, Skt. *pañcamāṃsa*), the flesh of cow, dog, horse, elephant, and human" (Garrett 2010: 301).

Table 1: The five essences used in *bcud len* recipes, containing the essence of substances that restore certain parts in the body. 92

Five Essences:	Containing the Essence of:	Restoring, nourishing, and sustaining inside the body:
mineral exudates/bitu- men (<i>brag zhun</i>), espe- cially from iron-contain- ing rocks (<i>lcags zhun</i>)	earth (sa)	flesh (sha)
calcite (cong zhi)	stones (rdo)	bones (rus)
molasses (bu ram)	wood/trees (shing)	physical strength (stobs)
honey (sbrang rtsi)	flowers (me tog)	radiance/lustre (mdangs)
white butter (mar dkar)	roots/grass (rtsa)	nutrition (bcud)

What are the four nectars in the *Four Tantras*? They are four plants that stand out as being very green, juicy, and full of *bcud*. While the *Four Tantras* mentions the four nectars only in one succinct nine-syllable stanza (*shug 'bru ba lu mtshe dang mkhan pa bzhi*), Sangye Gyatso, by adding another syllable to three of the four plant names, gives some further indication of which type of plant is meant: juniper seeds (*shug 'bru*), a "white" type of rhododendron (*ba lu dkar po*), a "sheep" type of ephedra (*lug mtshe*), and a "white" type of artemisia (*mkhan pa dkar po*).

Cantwell and Samuel write that in the context of the 'Chi med srog thig longevity practice of the Dudjom tradition, the four nectars cannot be substituted. The reason is that,

⁹² According to Yönten Gonpo (1982: 549) and Sangye Gyatso (1982: 1138).

⁹³ Tibetan plant names often include metaphorical animal names (Boesi 2007).

⁹⁴ Yönten Gonpo (1982: 549), Sangye Gyatso (1982: 1138), and Parfionovitch, Dorje, and Meyer (1992: 275) identify the four nectars as *Juniperus indica*, Rhododendron Capitalum Maxim, Ephedra sp., and Artemesia sp. /Tanacetum sp. respectively.

the substances themselves have the necessary natural qualities. The elixir plant saps consist of juniper (*shug pa*) to be collected when the leaves are spread; dwarf rhododendron (*ba lu*) to be collected when the flowers are open; artemisia (*mkhan pa*) to be collected when the leaves are green; and ephedra (*mtshe*) to be collected when the greenish colour and the fragrance is fading.⁹⁵

The five essences and four nectars are compounded into a *bcud len* known as the "greater essence extraction" (*bcud len che ba*), which is followed by the "lesser essence extraction" (*bcud len chung ba*), which also uses the five essences, but allows for the substitution of the four nectars by four types of bitumen. Overall, these two types of *bcud len* practices differ in terms of some of the ingredients, their compounding methods, as well as the complexity of the visualisation applied during consecration. In the "greater" practice the visualisations are more complex, of tantric nature, and involve the sexual fluids of the union of male and female deities through which the *bcud len* is consecrated, while in the "lesser" practice, the physician only visualises the single body of the deity Amitāyus.

In the following, both preparations are presented in more detail. In the *Four Tantras*, the preparation of the "greater" method is described as follows:

Soak one full bre^{96} and one zho^{97} of calcite ($cong\ zhi$) in water; take a full bre of the collected liquid having removed the sediment; add to [it] a handful of the liquid collected separately from half a bre of the four nectars and half a bre of bitumen ($brag\ zhun$); boil together with thirty ounces of milk and ghee; strain the water; mix it with two bre of each, crude sugar (molasses) and honey, and pour everything into a good skull⁹⁸ [for consecration]. [During the consecration the practi-

⁹⁵ Cantwell and Samuel, in press, chapter 5.

⁹⁶ A *bre* is a Tibetan volume measure equivalent to about one litre or two pints (THL 2010). In the *Four Tantras*, one *bre* is equivalent to six hands full (Men-Tsee-Khang 2011: 317).

⁹⁷ A zho is a Tibetan weight unit of approximately two grams (THL 2010).

⁹⁸ The human skull is an essential ritual implement in tantric rituals, but has more than a symbolic meaning. As Cantwell and Samuel (in press) point out in the context of the 'Chi med srog thig longevity ritual, a "good skull can bring you prosperity and benefit simply by keeping it, while a bad skull is

tioner] emanates and gathers [light] with a *bodhicitta* [attitude] from the male and female [forms of] the five families [and their respective seed syllable]: Vairocana om, Vajrasattva $h\bar{u}m$, Ratnasambhava $[tr\bar{a}m]$, ⁹⁹ Amitābha $hr\bar{\iota}$, and Karmavajra \bar{a} . Eat it in the morning of the first day of the waxing moon period; take it continuously before the heat of the day¹⁰⁰ and stop before sweat has appeared. ¹⁰¹

Sangye Gyatso adds only a short commentary to this recipe, emphasising the quality of the ingredients, such as which type of calcite would be best. However, his instructions on the consecration methods are very detailed. He explains how to visualise the five Buddha families, their seed syllables, colours, and light, along with the sexual fluids that flow from the union of the Buddhas and their consorts into the medicines and turn them into a bcud len. He writes that these detailed visualisation practices are in accordance with what has been explained in The Vase of Nectar (bdud rtsi bum pa), which is a text attributed to Padmasambhava and one of the seven teachings Sangye Gyatso received in relation to medicine. 102 The importance Sangve Gyatso gives to the consecration of bcud len is also evident in the fact that the "lesser" and "greater" bcud len practices were selected to represent chapter 90 in the series of 79 medical paintings he initiated. 103 Most of these paintings were made during the same years that Sangye Gyatso wrote the Blue

ominous, capable of impoverishing and harming you."

⁹⁹ Parfionovitch, Dorje, and Meyer 1992: 119.

¹⁰⁰ The *Blue Beryl* specifies this further: "It has to be taken early in the morning on an empty stomach." *skya rengs dus lto stong la bza' dgos* (Sangye Gyatso 1982: 1140).

¹⁰¹ dang po cong zhi bre gang zho gcig chur / bsdus pa'i khu ba bre gang rtsigs ma bton / bdud rtsi bzhi dang brag zhun bre phyed phyed / gud gud bsdus pa'i khu ba khyor ba re / 'o ma mar srang sum cu chu bcad la / bu ram sbrang bre do sbyar thod bzang blug / bai ro tsa na oṃ / badzra satva hūṃ / ratna sambha ba / a mi ta bha hrī / / karma badzra ā / / rigs lnga yab yum byang sems 'phro 'du bya / / zla ba yar ngo'i tshes gcig nang par bza' / /dro gong rgyun bsten rngul ma byung tsam bcag (Yönten Gonpo 1982: 549–50).

¹⁰² Czaja 2007: 353.

 $^{^{103}}$ Parfionovitch, Dorje, and Meyer 1992: 119–22, medical paintings nos. 52 and 53.

Beryl, between 1687 and 1688.¹⁰⁴ Notably, the two medical paintings representing chapter 90 depict the *bcud len* practices related to Buddhist material and not the other elixir recipes of Indian origin that are also listed in chapter 90. This could probably be interpreted as a sign of the growing emphasis given to the Buddhist aspects of *bcud len* practices during the time of Sangye Gyatso's reign, which would concur with the increased prominence given to Buddhism in medicine at his time, ¹⁰⁵ but more research is needed to elucidate this point.

The nature of these consecration practices is similar to traditional *sman sgrub* preparations and the making of 'nectar' medicines as described in twelfth and thirteenth century Nyingma literature. These flourished in Central Tibet at the same time that the *Four Tantras* developed into an influential medical text. A typical feature of these 'nectar' practices can be detected in the *bcud len* consecration: When the essence extraction is placed in the skull cup for consecration, the 'adding of ingredients' continues in the form of light rays, visualised sexual fluids in the form of *bodhicitta*, the lustre (*mdangs*) of the five elements, and essences (*rtsis*) of Buddha fields, which are 'added' to the *bcud len* through visualisation. The entire process is alchemical in nature in that it transforms not only the substances, but also the person who is preparing and consecrating the *bcud len*.

The second "lesser" *bcud len* practice is dedicated to Buddha Amitāyus¹⁰⁹ and is a *bcud len* cum longevity practice. The *Four Tantras* describes the recipe as follows:

¹⁰⁴ Czaja 2007: 352.

¹⁰⁵ See, for example, Schaeffer 2003, and Gyatso J. 2004 for details on this development in Tibetan medicine at the end of the seventeenth century.

¹⁰⁶ For example, Garrett 2010: 301.

¹⁰⁷ Garrett 2010: 302.

¹⁰⁸ See also Garrett 2009, 2010.

 $^{^{109}}$ See Samuel 2012 for details on Amitāyus longevity practices in relation to health in Tibet.

[As for] the small [method]: [take] a full *phul*¹¹⁰ of calcite, and burn [it to ash] in a fire, [soak it] in water, extract it [and] cook it with a full *bre* of milk and three *srang*¹¹¹ of ghee until it turns into [the consistency of] sheep curd. [Take] one handful each of the four [kinds of] bitumen or of the four nectars. Mix [everything] with a third of a *phul* of honey and three *srang* of molasses, boil it for a very short time, and keep it in a good vessel. Mix it with equal parts of calcite (*cong zhi*) and iron stone (*lcags rdo*) and with the three sweets [molasses, honey, and white sugar]. One should pour [the mixture] into a skull and meditate on one's own personal deity.¹¹²

Sangye Gyatso describes the meditation in great detail, referring again to *The Vase of Nectar*.¹¹³ During this Amitāyus practice the physician draws life forces (*tshe*) from surrounding elements while reciting the long-life mantra of Buddha Amitāyus. This practice was modified by the Herbal Products Research Department of the Men-Tsee-Khang in Dharamsala for the brochure of a *bcud len* product labelled "Elixir of Rejuvenation." This meditation practice, through which individuals using the product can consecrate and bless it for themselves, is a simplified version of the *bcud len chung ba* practice mentioned in the *Four Tantras*.

Set 3: Other essence extractions

Chapter 90 continues with a third set of *bcud len* recipes which are classified as (1) "root essence extraction" (*rtsa ba'i bcud len*) made

¹¹⁰ A *phul* is a Tibetan measurement equivalent to a fourth of one *bre*, i.e. approximately a quarter of a litre (THL 2010).

 $^{^{111}}$ A *srang* is a Tibetan measurement equivalent to ten *zho* (of money) or approximately one ounce of weight (THL 2010).

¹¹² chung ba cong zhi phul gang spang mer bsregs / chu nang bton te 'o ma bre gang dang / mar srang gsum btsos lug zho tsam gyur la / brag zhun bzhi nam bdud rtsi bzhi khyor re / sbrang phul sum cha bur srang gsum dang sbyar / dar tsam btsos te snod bzang bcangs la bsten / cong zhi lcags rdo cha mnyam mngar gsum sbyar / thod par blug la rang nyid yi dam bsgom / (Yönten Gonpo 1982: 550).

¹¹³ Sangye Gyatso 1982: 1140.

¹¹⁴ The product is called *rgas pa gso ba bcud len chen mo* (lit. "the great essence extraction for the aged"). See Gerke 2012b: 212–14.

from the root of ra mo sha[g], (2) "flower essence extraction" (me tog gi bcud len) made from non-toxic flowers, (3) "essence extraction of lightness" (yang ba'i bcud len) made with sulphur, (4) "stone essence extraction" (rdo'i bcud len) made from purified calcite, and (5) "nectar essence extraction" (bdud rtsi'i bcud len) made from human faeces (dri chen). The last type is based on the first of the "five nectars" mentioned in Nyingma tantric texts. 115 It is 'purified' and mixed with roasted barley flour (tsam pa) or rolled into pills with myrobalan, the "three sweet ones" (mngar gsum)116 and the "six good ones" (bzang drug).117 The late senior Tibetan physician Tenzin Choedrak talked about the use of dri chen bcud len as a source of nourishment during his time in a Chinese prison; there are ways to properly purify dri chen through washing it with certain types of water and burning it.¹¹⁸ The Four Tantras mentions that these five essence extractions will lead to long life and can treat certain diseases.

Set 4: Two bcud len recipes

The fourth set of *bcud len* recipes is not a clearly defined set but comprises only two recipes that do not seem to fit into any of the other sets. They are described only briefly in the *Four Tantras* as well as in Sangye Gyatso's commentary. The first one contains *so ma ra dza* and black sesame oil (*til nag*) and is used for skin diseases. The second recipe is made from "false pepper" (*byi*),¹¹⁹ ginger (*ga*), and the medicinal tree *go bye*,¹²⁰ to which Sangye Gyatso adds

¹¹⁵ See n. 91 above, and Garrett 2010.

¹¹⁶ The "three sweet ones" are white sugar, molasses, and honey (*shel ka ra*, *bu ram, sbrang rtsi*).

¹¹⁷ The six good ones are: smaller cardamom (*sug smel*), greater cardamom (*ka ko la*), saffron (*gur gum*), clove (*li shi*), nutmeg (*dza ti*), and bamboo manna (*cu gang*). Bamboo manna has several types and is a siliceous excretion of a special variety of bamboo.

¹¹⁸ Sonam Dolma (personal communication, July 7, 2013).

¹¹⁹ Short for *byi tang ga*, which has been identified as *Embelia ribes* (Ploberger 2012: 391).

¹²⁰ Go bye has been identified as Semecarpus anarcadium (Clark 1995:

a quote from the *Eight Branches*, which states that this *bcud len* will "make you cross the river of old age with its waves of diseases in a state of youthfulness." ¹²¹

The chapter concludes with the promise that even a poor person without attendants will be able to achieve the benefits if he follows these prescriptions. Moreover, the author admits that these essence extractions will not give their desired results during a period of illness arising during a *bcud len* practice, but that the rejuvenating benefits will be achieved once the disease has been cured.

What makes a substance rich in bcud?

Next, I will look at the various bcud len ingredients discussed above and ask the question: what is it that makes these substances rich in bcud according to the Four Tantras? The material presented shows that there is no single answer to this question. Garlic, for example, is considered rich in bcud because its mythological origin was close to the divine – the body of a semi-god. Bitumen is rich in bcud because it has several qualities (oily, smooth, and heavy) and numerous tastes (sour, bitter, and astringent), which empowers it to affect and balance various nyes pa disorders. Many plants have only one taste and one or two powers and therefore have only specific pharmacological actions attributed to them. Apart from a wider range of tastes and powers, the additional link to metals, especially iron, makes bitumen even more potent. Leadwort is considered a bcud len because it increases the digestive heat, which in turn enhances the distillation process of the essences and bodily substances. The three myrobalan fruits are said to balance the nyes pa and also purify the body; they are the most widely-used bcud len ingredients in the Astāngahṛdayasamhitā. The five essences carry within them the bcud from the five outer elements, which they have concentrated to such an extent that they are considered essence foods (sugar, honey, and butter) as well as sources of vitality and nourishment

^{146).}

¹²¹ rgas pa'i chu bo nad kyi rba rlabs can / na tshod ldan pa'i skyes bu de brgal 'gyur (Sangye Gyatso 1982: 1143).

(bitumen, calcite). The four nectars (juniper, rhododendron, artemisia, and ephedra) are considered rich in *bcud* because their saps are of elixir-quality, they have juicy green leaves, and two of them – juniper and rhododendron – remain green throughout the winter. All of them are considered full of natural qualities. The *bcud len* of the five essences and four nectars seem to be the most sophisticated *bcud len* recipes of the *Four Tantras* and are further refined and consecrated through alchemical and tantric essence extraction practices, which I described above based on Sangye Gyatso's commentary.

These reasons given here for why a substance is rich in *bcud* are based on textual sources. Questioning pharmacologists who have received oral commentaries from their teachers and have worked with *bcud len* substances in making medicines and tonics would provide a more comprehensive picture to further understand *bcud* in contemporary Tibetan pharmacology. However, from this initial textual study we can conclude that the *Four Tantras* presents essence extractions of varied origins, depicting a multitude of factors that are employed to determine whether a substance is rich in *bcud*.

Summary and concluding remarks

In this paper, I presented ingredients and recipes of rejuvenating essence extractions (*bcud len*) mentioned in two chapters of the *Four Tantras*. The fact that the topic of *bcud len* practices is discussed not only in the chapter on treating the aged (chapter 90, third tantra) but also in the chapter on maintaining normal health (chapter 23, second tantra), shows that *bcud len* practices are presented as having disease-preventive applications as well as the ability to avert premature aging. They are believed to increase the digestive heat and nourish the seven bodily substances, aiming at preventing illness, rejuvenating the body, and slowing down the ageing process. As preventive practices for the middle-aged, they involve a rigorous cleansing of the body, followed by a fasting re-

¹²² See Gerke 2012b for contemporary ethnographic data.

treat during which the practitioner lives on nothing but *bcud len* pills. The inherent difficulties with such rigorous fasting retreats are also expressed in the Tibetan proverb in this article's opening quote. Preventive application of essence extractions that are easier to put into practice include instructions of taking *bcud len* "in addition" to a normal diet, something we would now call a supplement.

I conclude from this material that the ways in which *bcud len* recipes are listed in the *Four Tantras* shows that we are dealing with a variety of sources. Some recipes were clearly taken from Vāgbhaṭa's *Aṣṭāṅgahṛdayasaṃhitā*, others probably from early Buddhist Nyingma nectar and consecration practices, yet to be identified. There might also be other Tibetan medical and/or Buddhist sources that went into the compilation of the *bcud len* sections of the *Four Tantras*; these still need to be researched.¹²³

Sangye Gyatso in his *Blue Beryl* commentary regularly refers to the Eight Branches as a source of knowledge on bcud len and thus adds information from the Astāngahṛdayasamhitā that the Four Tantras did not include. However, his emphasis is on the consecration rituals of the "lesser" and "greater" bcud len practices, involving the five essences and four nectars well-known in Buddhist Nyingma traditions. This supports previous arguments that he utilised his medical writings extensively to establish Buddhist thought in the sciences.¹²⁴ While the Four Tantras is known for its poetic brevity regarding secret instructions, it cannot be said that it emphasises the ritual consecration of bcud len substances as such; consecration is mentioned only briefly and only in two out of nineteen bcud len recipes in chapter 90. In comparison, the bcud len fasting retreats, also mentioned in Vāgbhata's Astāngahrdayasamhitā, receive more attention; they are even mentioned twice, both in chapter 23 and chapter 90. However, the majority of bcud len substances and recipes presented in chapter 90 evolve around the making of rejuvenating and nourishing elixirs. Some of these elixirs are explicitly mentioned as treating symptoms of old age as well as giving vigour to the aged, while the rejuvenating fasting retreats address the middle-aged.

¹²³ See the forthcoming doctoral thesis by Jamyang Oliphant.

¹²⁴ See n. 105.

The analysis of what makes a substance rich in *bcud* revealed how powers, tastes, sources, qualities of 'juiciness,' and other characteristics are linked to concepts of *bcud*. What connects all of these *bcud len* ingredients presented in the two chapters of the *Four Tantras* is their link to various ideas of vitality – whether divine, spiritual, or material in outlook – that have influenced Tibetan medical and pharmacological practices of revitalisation and nourishment for a very long time.

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