Ancient Pharmacognosy Book by Karmapa (1319)

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ABSTRACT

Background: Over the past 30 years, dozens of ancient and under-researched medical scriptures have been discovered, including a few medicinal books written by Indian and Tibetan scholars and monks from the 8th and 14th centuries that had not been studied in Mongolia. One of them is Karmapa Rangbyun rdorje's "Sman ming rgya mtsho." Therefore, we conducted this study to analyze and summarize the content of the scripture in addition to translating it from Tibetan. Purpose: First, we translate Karmapa Rangbyun rdorje's "Sman ming rgya mtsho" (Eng: An Ocean of Crude Drug Names) from ancient Tibetan into modern Mongolian, then examine the content of the scripture and clarify Rangbyun rdorje's relationship with the Mongolians through the kings of the Yuan Dynasty. Methodology: g.Yu thog Yon tan mgon po sogs. sngo 'bum sman gyi gtera mdzad. Karma pa Rang byung rdo rje. Sman ming rgya mtsho, Mi rigs dpe sgrun khang. 2006, 850 mm x 1168 mm. The following research methods were employed: the source study method and the comparative method. Conclusion: According to the contents of "An Ocean of Crude Drug Names," written by Rangbyun rdorje in 1319, crude drugs were divided into 11 groups, and within each group, they were further categorized into 10 groups based on their medicinal potency. In the category of drug potency: 40 in precious medicine, 58 in stone medicine, 28 in water medicine, 81 in wood medicine, 15 in nutrient plants, 113 in wood medicine, herbal medicine, and medicinal plants that grow in the plains, 263 in herbal medicine and medicinal plants that grow in fields, 8 in three vehicles (sman rta) of medicine to prefer in general, 21 in salt medicine, 21 in ash medicine and 171 in animal origin medicine group respectively. Their respective medicinal powers were also noted in the book. In the future, it will be necessary to conduct an in-depth study of "An Ocean of Crude Drug Names" by Karmapa Rangbyun rdorje, the primary work on ancient pharmacognosy as old as the hills.

Keywords: Crude drugs, Pharmacognosy book, Rangbyun Rdorje, Yuan Dynasty.

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INTRODUCTION

The accumulated domestic and intellectual experience of the ancient nomadic tribes living in Mongolia, along with the way of life and wisdom derived from this experience, had unique characteristics. These skills were developed in response to the extreme climate of Central Asia, as well as the challenges of animal husbandry and harsh living conditions. As time passed, the accumulated experience was enriched by the knowledge of the Mongolian ancestors, forming a rich cultural heritage among the nomads. A significant part of this is medicine and prevention of diseases. These are originally rooted in Mongolian domnokh therapy,^[1] the basis of nomadic medicine. Throughout its development, it has incorporated the theories and methods of



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traditional medicine from countries such as India, China, and Tibet and has expanded to encompass a wide range of medical therapies.

Since the beginning of the 21st century, traditional Mongolian medicine has entered a new stage of development, and the study of its history and records has intensified. As a result, our researchers established that Mongolian medicine has a history spanning 5,000 years, based on archaeological and documentary evidence from China, Central Asia, and Mongolia.^[1] At the same time, the project to publish "108 volumes of traditional medicine" was implemented from 2019 to 2023. Primarily, we have translated and published rare and precious scriptures, manuscripts, and books written by ancient Mongolian doctors and scholars from the 16th century to the early 21st century.^[2] Another principal work carried out within the framework of the project is not only the works written in Tibetan by Mongolian monks and doctors, but also the pharmaceutical scriptures of doctors and scientists who have had an essential impact on the history of Mongolian

medicine are being translated into research circulation. Additionally, some Mongolian researchers working in the field of traditional medicine have obtained doctoral degrees in ancient medical books written in Chinese, Tibetan, Manchu, Persian, and Arabic, accompanied by a monograph.

The ancient medical scriptures published by this project will provide an opportunity to explore the development of Mongolian medicine in antiquity, the influence of doctors, the significance of their works, and the quality of medical care.^[3] On the other hand, with these works, the intellectual heritage of traditional medicine will be established and made available to the public, enabling them to learn how to protect their health and prevent diseases through traditional medicine. Researchers and doctors will also acquire the fundamental knowledge to create new ones.

Over the past 30 years, dozens of ancient and under-researched medical scriptures have been discovered, including a few medicinal books written by Indian and Tibetan scholars and monks from the 8th and 14th centuries that had not been studied in Mongolia. One of them is Karmapa Rangbyun rdorje's "Sman ming rgya mtsho" (Eng: An Ocean of Crude Drug Names). Therefore, we conducted this study to analyze and summarize the content of the scripture in addition to translating it from Tibetan.

Research goal

First, we translate Karmapa Rangbyun rdorje's "Sman ming rgya mtsho" (Eng: An Ocean of Crude Drug Names) from ancient Tibetan into modern Mongolian, then examine the content of the scripture and clarify Rangbyun rdorje's relationship with the Mongolians through the kings of the Yuan Dynasty.

METHODOLOGY

Basic research material

g.Yu thog Yon tan mgon po sogs. Sngo 'bum sman gyi gtera mdzad. Karma pa Rang byung rdo rje. Sman ming rgya mtsho, Mi rigs dpe sgrun khang. 2006, 850 mm x 1168 mm.

Research methods

The following methods were used in the research.

Source study method

The source-study method includes research activities of books, literary works, sources, and papers. We made a historical study on the date and place of birth of the authors and their literary works in order of the written period starting from the earliest, thus comparing special, innovative, and creative ideas in terms of content and mentality with other original literary works by using research materials by the research goal and objectives.

The comparative method

Comparison is a fundamental tool of analysis. It sharpens our powers of description and plays a central role in concept formation by bringing into focus suggestive similarities and contrasts among sources. The comparative method involves the researcher collecting data about different medicinal scriptures and other sources, then comparing one source with another to identify information that is present in one book or paper but not in another.

RESULTS

Mongol Khans of the Yuan Dynasty and Karmapa Rangbyun Rdorje

The Third Karmapa Rangbyun rdorje was a prominent figure in Tibetan religion, medicine, and culture, making significant contributions to the strengthening of Mongolian-Tibetan relations and enhancing the influence of the Garmaa Gaajud tradition in Mongolia. Therefore, before examining the medical works of the Third Karmapa Rangbyun, it is important to clarify the relationship between Mongolia and Tibet through this person. Garmava Rangundorj in Mongolian, Karmapa Rangbyun rdorje in Tibetan, was born in 1284 or January 8th of the wooden monkey year of the lunar calendar, in a place called Zapuganshurmo (Tsaphu gangs zhur mo) in Upper Tibet. In 1294, at the age of 10, he acquired various books and knowledge from Sheravbal (Shes rab dpal), Nyanraigendunvum (Gnyan ras dge 'dun 'bum), and Namtsovamijoddorj (Gnam mtsho ba mi bskyod rdo rje), including Kalacakra and Chöd teachings. In 1301, at the age of 18, he thoroughly studied the five standard works: Pramāhi, Prajñāpāramitā, Madhyamaka, Abhidharmakośa, and Vinaya. He acquired the complete knowledge and teachings of Padamba Sanjay (Pha dam pa sngs rgyas, 1117) and Ojanba (Orgyenpa) from the teacher Nedogungaadonduv (Snye mdo kun dga' don grub, 1268), as well as the Karma Kagyu tradition from Zogdan Namtso (Rdzogs ldan gnam mtsho) monk. In addition to studying religious books, he focused on improving the livelihood of the local people, and for the benefit of society, he completed the construction of an iron bridge over the river Sogchu (Sogchu, the river on the east bank of the Salvin) on the east side of Garmaa Gon (Karma dgon).^[4] Hereby, Karmapa Rangbyun rdorje was a prominent and prolific monk who lived from the end of the 13th century to the early 14th century. An influential event in Rangbyun rdorje's life was his visit to the Yuan State at the invitation of the Mongol Khans, during which he participated in several significant historical events.

Rangbyun rdorje returned to Tibet in 1331, and that year, he received an invitation from the Yuan emperor Tugh Temur (r. 1328-1332) to visit the imperial capital of Daidu, now Beijing. Tugh Temur Khan is referred to by the title of Jayaatu Khan in most Mongolian historical sources. During the reign of Jayaatu Khan, the book of Confucius was translated from Chinese and the book about shamanism from Uyghur into Mongolian, respectively, and Khusekhui, a physician and official in charge of food and drink at the royal palace, wrote the book "Fundamental Principles of Food and Drink".^[5]

Rangbyun rdorje arrived in the Yuan capital on November 6, 1332. Mongol Khan Tugh Temur passed away while Rangbyun rdorje was on the end route. His successor, Rinchinbal Khan, also died while Rangbyun rdorje was in the capital. Therefore, he mediated the dispute between the Mongol princes over the succession to the throne and was present when Toghon Temur (1333-1370), the last king of the Yuan Dynasty and a descendant of Chingis Khan's golden family, ascended the throne in Shangdu. While in the capital, he advised the new khan on religious matters and appointed his disciple Gungaadorj (kun dga' rdo rje, 1309-1364) the abbot of Tsalguntan (Tshal gung thang) as "Situ" (司徒) (One of the three important posts) and supported him in awarding him the title of Guoshi (國師) "State teacher." Additionally, the decision of the Khan to exempt the Zurbu monastery from taxes was an achievement that proves the growing influence of the Garmaa Gaajud tradition in Mongolian and Tibetan affairs.^[6] This document provides a comprehensive account of the conflict between the Mongol Khans over the succession and the secret conspiracy in the palace.

Rangbyun rdorje left China in 1334, passing through Mount Utai, Minyak, and Markham, and reached Zurbu Monastery the following year. He spent the winter of that year at Samya Monastery. He had obtained permission to leave Yuan after promising to return in two years. After that, he returned to the Yuan state in 1336 and arrived in Daidu in 1337, shortly after he arrived in Tibet. In 1338, at a meeting of Yuan officials, he announced his wish: "I am a yogi; I will vanish like a mist, allowing those who wish to comprehend the implications of my teachings to do so expeditiously".^[7] Rangbyun rdorje traveled to Zurbu Monastery in Tibet in 1334 and returned to Daidu, the capital of the Yuan State, in 1337. This is a testament to the great significance of this person in Mongolian-Tibetan relations.

Pharmacognosy book of Karmapa Rangbyun rdorje

Dozens of ancient scriptures related to traditional medicine have been discovered, including several previously unexplored Tibetan medicinal books written by Tibetan scholars and monks from the 8th to 14th centuries. One of the most noteworthy of these works is "An Ocean of Crude Drug Names," written by Karmapa Rangbyun rdorje in 1319. In fact, according to today's understanding, it is an ancient book of pharmacognosy. This scripture contains medicinal crude drugs of plant, mineral, and animal origin. Despite the limited number of pages, the content is rich, particularly the drug names, which are of great significance in the pharmacological studies of traditional Mongolian medicine yet remain largely unexplored. Rangbyun rdorje's "An Ocean of Crude Drug Names" was published in Tibetan in the 2006 edition of the book series, g.Yu thog yon tan mgon po sogs. sngo 'bum sman gyi gtera mdzod. Kan su'u Mi rigs dpe sgrun gang, which has become the primary reference for our research today. The original manuscript of this book is housed in the archives of the Tibetan Medical Committee of the Tibet Autonomous Region, China. Our research team has completely translated this book from Tibetan to Mongolian.

At the end of Karmapa Rangbyun rdorje's "An Ocean of Crude Drug Names," it is written: "Rangbyun rdorje wrote down eight hundred and thirteen medicinal plants, mineral and animal-origin crude drugs in the spirit of helping others, summarizing many theories, methods, and commandments, and following the path of a rishi (enlightened person)".^[8] However, it has been determined that there are 819 names of medicinal crude drugs, according to the main content and when counting all medicinal crude drugs individually. These were divided into 11 groups. Herein:

In addition to dividing medicinal crude drugs into 11 groups, each group was further divided into 10 subgroups according to their potency, and the power of each subgroup was recorded. 40 in the precious medicine group, 58 in the stone medicine group, 28 in the water medicine group, 81 in the wood medicine group, 15 in the nutrient plants group, 113 in wood medicine, herbal medicine, and medicinal plants that grow in the plains, 263 in herbal medicine and medicinal plants that grow in fields, 8 in three vehicles (sman rta) of medicine to prefer in general, 21 in salt medicine, 21 in ash medicine and 171 in animal origin medicine.

The remarkable aspect, however, is that if the contents of the book are viewed as a whole, there are 11 groups:

- 1. Precious medicine group.
- 2. Stone medicine group.
- 3. Water medicine group.
- 4. Wood medicine group.
- 5. Nutrient plants group.
- **6.** Wood medicine, herbal medicine, and medicinal plants that grow in the plains.
- 7. Herbal medicine and medicinal plants that grow in fields.
- 8. Three vehicles (sman rta) of medicine to prefer in general.
- **9.** Salt medicine group.
- 10. Ash medicine group.
- 11. Animal origin medicine group.

These 11 groups were classified into three main general categories: plant, mineral, and animal-origin crude drugs, and the percentage of each was determined. These include: of the total 819 medicinal crude drugs, 63.2% are medicinal herbs, 17% are mineral-origin crude drugs, and 19.8% are animal-origin crude drugs.

During our research, we compared the 11 groups of medicinal crude drugs from Karmapa Rangbyun rdorje's book "An Ocean of Crude Drug Names" with the groups from the famous book titled "Beautiful Wondrous Eye Ornament." The book, written by Toin Jambaldorj (1792-1855), is a prominent Figure in Mongolian medicine (Figure 1).^[9]

In Jambaldorj's "Beautiful Wondrous Eye Ornament," there are a total of 879 medicinal crude drugs divided into eight groups:

- 1. Precious medicine group.
- 2. Stone medicine group.
- 3. Earth medicine group.
- 4. Nutrient plants group.
- 5. Wooden medicine group.
- 6. Medicine group from the plains.
- 7. Herbal medicine group.
- 8. Animal origin medicine group.

Karmapa Rangbyun rdorje composed his work "An Ocean of Crude Drug Names" in 1319, and Jambaldorj wrote "Beautiful Wondrous Eye Ornament" in 1851. There is a 532-year difference between the lives of these two people. Therefore, the classification, nomenclature, definition, and use in the scripture written in 1319, more than 500 years ago, differ significantly from those in the "Beautiful Wondrous Eye Ornament" written in 1851. However, an interesting fact is that Jambaldorj cited the Karmapa Rangbyun rdorje's "An Ocean of Crude Drug Names" when writing his "Beautiful Wondrous Eye Ornament" as is clear from his bibliography.^[10]

Jambaldorj combined some of the 11 groups of medicinal crude drugs in Karmapa Rangbyun rdorje's "An Ocean of Crude Drug Names" in his work "Beautiful Wondrous Eye Ornament" and created a total of eight groups. From these eight groups, the earth medicine group is not found in Karmapa Rangbyun rdorje's book "An Ocean of Crude Drug Names." For example, gold sand, oxidized lead, clay brick, clay jar, and so on.^[11]

Jambaldorj focuses, in most cases, on the morphology of the whole animal and its habitat. He newly classifies animals into clawed birds, beaked birds, herbivorous animals, wild animals, and "power animals" (magical animals). Domestic animals, creatures living in holes and burrows, and those that "thrive in moisture." Such reclassifications are common throughout the work and can be found within all of his eight categories of materia medica.^[12] This is because Mongolians are nomadic people and hunt a lot, so they are well-versed in the uses of animal-origin crude drugs. In addition, the names of medicinal crude drugs were written in Tibetan, Mongolian, Chinese, and Manchu languages. The origin of some crude drugs was clarified and reclassified, their descriptions were augmented, and the scope of application was broadened. Furthermore, Jambaldorj included illustrations of plant, mineral, animal animal-origin crude drugs in his "Beautiful Wondrous Eye Ornament" book, which has become highly engaging and cognitively significant.

However, Karmapa Rangbyun rdorje's "An Ocean of Crude Drug Names" has not lost its value even in the 21st century; it remains the main study of medicinal crude drugs and still requires further investigation.

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Figure 1: A page from "Beautiful Wondrous Eye Ornament" by Jambaldorj (1851).

CONCLUSION

On November 6, 1332, and subsequently in 1337, Karmapa Rangbyun rdorje arrived at the capital city of Daidu upon the request of the Emperor of the Yuan State. Not only did he engage in philanthropic activities, but he also worked closely with Mongol Khans, provided guidance on economic and political matters, and played a role in resolving conflicts. Evidence suggests that he had a significant influence on Mongol-Tibetan relations.

According to the contents of "An Ocean of Crude Drug Names," written by Rangbyun rdorje in 1319, crude drugs were divided into 11 groups, and within each group, they were further categorized into 10 groups based on their medicinal potency. In the category of drug potency: 40 in precious medicine, 58 in stone medicine, 28 in water medicine, 81 in wood medicine, 15 in nutrient plants, 113 in wood medicine, herbal medicine, and medicinal plants that grow in the plains, 263 in herbal medicine and medicinal plants that grow in fields, 8 in three vehicles (sman rta) of medicine to prefer in general, 21 in salt medicine, 21 in ash medicine and 171 in animal origin medicine group respectively. Their respective medicinal powers were also noted in the book. In the future, it will be necessary to conduct an in-depth study of "An Ocean of Crude Drug Names" by Karmapa Rangbyun rdorje, the primary work on ancient pharmacognosy as old as the hills.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

SUMMARY

The results of this research are summarized as follows: In 1332 and 1337, Karmapa Rangbyun Rdorje arrived at the capital city of Daidu upon the request of the Emperor of the Yuan State. Not only did he engage in philanthropic activities, but he also worked closely with Mongol Khans, provided guidance on economic and political matters, and played a role in resolving conflicts. Evidence suggests that he had a significant influence on Mongol-Tibetan relations. At the same time, our research states a hypothesis that some of his books, including those related to medicine, were accessible to Mongolians. On the other hand, our study emphasis that his pharmacognostical study included the book "An Ocean of Crude Drug Names," written in 1319, crude drugs were divided into 11 groups, and within each group, they were further categorized into 10 groups based on their medicinal potency. In the category of drug potency: 40 in precious medicine, 58 in stone medicine, 28 in water medicine, 81 in wood medicine, 15 in nutrient plants, 113 in wood medicine, herbal medicine, and medicinal plants that grow in the plains, 263 in herbal medicine and medicinal plants that grow in fields, 8 in three vehicles (sman rta) of medicine to prefer in general, 21 in salt medicine, 21 in ash medicine and 171 in animal origin medicine group respectively. Their respective medicinal powers were also noted in the book. In the future, it will be necessary to conduct an in-depth study of "An Ocean of Crude Drug Names" by Karmapa Rangbyun rdorje, the primary work on ancient pharmacognosy as old as the hills.

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