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**Verification and Research Methods of the
Saddharmapundarīka Manuscripts' Sanskritization
Using ICT Linguistic Analysis**

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1. Introduction
2. Demonstrating the Sanskritization of the *Saddharmapuṇḍarīka* manuscripts: a study of Kern's corresponding terms in the text
 - 2.1. Overview of the *Saddharmapuṇḍarīka* manuscripts
 - 2.2. Discovery of variant readings in the *Saddharmapuṇḍarīka* manuscripts
 - 2.3. Kern's 91 variant readings and their classifications
 - 2.4. About *gilāna* : *glāna* / *gailānya* : *glānya* / *mandagailānya* : *mandaglāna*
3. A contrastive study method of the *Saddharmapuṇḍarīka* and the three Chinese translations using ICT linguistic analysis
 - 3.1. Need for a contrastive study of the *Saddharmapuṇḍarīka* and the three Chinese translations
 - 3.2. The Kern-Nanjio edition's problems and its revised editions
 - 3.3. An example of the contrast between the *Saddharmapuṇḍarīka* manuscripts and the three Chinese translations
4. Conclusion and future research issues
 - 〈Acknowledgements〉
 - 〈Abbreviations, Citations, and References〉

1. Introduction

This paper is revising, and adding to, the content presented at the 19th International Association of Buddhist Studies Congress (IABS) and the 18th World Sanskrit Conference (WSC2023). Initially, the IABS and the WSC2023 planned to hold their congresses in August 2020 and January 2021, respectively, but the congresses were postponed due to the global spread of COVID-19. As a result, the above two conferences were held in a hybrid (online and face-to-face) format for the first time. The IABS was held at Seoul National University for five days from 15-19 August 2022. The presentation's content was "Demonstrating the Sanskritization of the *Saddharmapuṇḍarīka* Manuscripts: A Study of Kern's Corresponding Terms in the Text."¹ The WSC2023 was held at the National Australian University from 9-13 January 2023. The content of the presentation was "A Contrastive Study Method of the

¹ IABS XIXth Congress's website: <http://iabs2020.snu.ac.kr/>. The abstract of the IABS XIXth Congress's presentation is below: (partially corrected)

Sanskrit Lotus Sutra, the *Saddharmapuṇḍarīka*, and the Chinese Lotus Sutra, the *Myōhō-rengē-kyō*, Using ICT Linguistic Analysis.”²

“The Sanskrit Lotus Sutra, *Saddharmapuṇḍarīka* (SP), is regarded as one of the earliest examples of Mahayana Buddhist texts. There are three classical Chinese translations in existence, including Kumārajīva’s translation, 鳩摩羅什『妙法蓮華經』the *Myōhō-rengē-kyō*. Lotus Sutra is one of the most essential sutras in East Asia. It has influenced the formation and development of other sutras, ideas, and cultures. Where literary problems and issues arise about the SP and the Lotus Sutra, particularly regarding the correct interpretation of the *Myōhō-rengē-kyō*, it is vital to study the SP in its original language.

The original SP is a Buddhist Hybrid Sanskrit (BHS) text and frequently uses Middle Indo-Aryan (MIA) word forms and language. Edgerton classified Mahayana texts broadly into three classes. First, Edgerton calls the unique vocabulary, word forms, and syntax in Mahayana sutras BHS.

The extant SP manuscripts can be broadly divided into the Central Asia tradition (CA) and the Gilgit-Nepal tradition (G-N). Kern and Edgerton advocated that in its prototype form, the SP was compiled in MIA and was converted to Sanskrit as it was passed down over the years (Kern-Edgerton’s hypothesis). Tsuji studied the SP in detail and pointed out the following: (1) The BHS forms frequently appear in the verse texts and Skt forms in the prose texts, but some BHS forms are found in the prose texts. (2) Various degrees of Sanskritization occurred in the course of transmission, which caused some differences in hybridity, and it is considered that these became extant manuscripts.

I noted Kern’s list’s variant readings (91 corresponding terms) about the above discussion in a previous study. The results of the previous research support the points made by Tsuji. My presentation is another example of using variant readings that can be highlighted.

For this presentation, existing SP recensions of older and newer copy ages have been used. Using the Kern-Nanjo (KN) revision as a reference, passages in the individual SP recensions that correspond to KN have been identified. Based on this, the corresponding passages in each manuscript have been identified. The methods used for determining the three sets of variant readings highlighted are discussed in another paper. This presentation looks in detail at some groups of Edgerton’s variant readings in the context of Kern-Edgerton’s hypothesis and Tsuji’s points.”

² WSC2023 XVIIIth Congress’s website: <https://www.wsc2021.com.au/>. The abstract of its presentation is below: (partially corrected)

“The Sanskrit Lotus Sutra, *Saddharmapuṇḍarīka* (SP) is regarded as one of the earliest examples of Mahayana Buddhist texts. There are three classical Chinese translations of the Lotus Sutra in existence, including Kumārajīva’s translation (鳩摩羅什『妙法蓮華經』. *Myōhō-rengē-kyō*. Lotus Sutra), which is one of the most important sutras in East Asia. Where literary problems and issues arise in relation to the SP and its Chinese translations, in particular with regard to the correct interpretation of the Lotus Sutra, it is vital to study the SP in its original language.

SP manuscripts before the year of the Lotus Sutra translation are not extant, and the source for its translation is unknown.

Solving the problem of the source SP for the Lotus Sutra’s translation requires a strict contrast between existing SP manuscripts and the Chinese translations, and a linguistic empirical study of SP manuscripts that satisfies academic demands is currently underway as a contrasting study of the Chinese translation method.

In order to promote linguistic empirical research on the extremely large number of target points of word form, vocabulary, grammar, and others in existing SP manuscripts, we have co-developed an ICT language analysis program tool. The purpose of this presentation is to provide a new perspective on the SP traditions and the Chinese translations with the ICT linguistic analysis tool.”

2. Demonstrating the Sanskritization of the *Saddharmapuṇḍarīka* manuscripts: a study of Kern's corresponding terms in the text

The Sanskrit Lotus Sutra, the *Saddharmapuṇḍarīka* (SP), is one of the earliest examples of Mahayana Buddhist texts. With the advent in 406 CE of Kumārajīva's Chinese translation, (鳩摩羅什訳『妙法蓮華經』. the *Myōhō-rence-kyō*³. The Lotus Sutra), which was handed down and accepted in many parts of East Asia.

Although the source of the *Myōhō-rence-kyō* is still unknown, the SP—which is probably one of the original texts of the Chinese translations—is one of the representative sutras composed in Buddhist Hybrid Sanskrit (BHS), as so named by Franklin Edgerton. The SP contains a mixture of Middle Indo-Aryan (MIA), BHS, and classical Sanskrit (Skt) word forms and language. Edgerton classified Mahayana texts broadly into three classes. He calls the unique vocabulary, word forms, and syntax in Mahayana sutras BHS.⁴ The *Saddharmapuṇḍarīka* text consists of two styles, one of prose and the other of verse, with many MIA expressions and BHS in the SP's verses.

2.1. Overview of the *Saddharmapuṇḍarīka* manuscripts

The first discovery of a *Saddharmapuṇḍarīka* manuscript was made by the British Minister, Brian Houghton Hodgson, in Nepal in 1824.⁵ Since then, sixty-seven extant SP manuscripts have been discovered, and these can be organized into forty-eight types and found in different places. These can generally be classified into two traditions, as shown in Fig 1: the Central Asia (CA) and the SP manuscripts' Gilgit-Nepal (G-N) traditions. The G-N has two groups of traditions, Nepal-Tibetan and Gilgit. We have access to facsimile editions and recensions of transcription in Roman script for almost all existing SP manuscripts. The oldest are the fragments of the Lüshun Museum Collection, with an estimated time of transcription to be around the middle of the 5th century. And the latest is the Nepalese version from the 19th century, copied in the Asiatic Society of Paris (P3) or the collection of the Royal Asiatic Society of Great Britain and Ireland (R). We regard the Lüshun Museum Collection (Lü) as the oldest among all manuscripts of the SP.⁶

2.2. Discovery of variant readings in the *Saddharmapuṇḍarīka* manuscripts

Among the SP manuscripts available at the time, Johan Hendrik Caspar Kern 1912 compared corresponding parts of the Kashgar manuscript O, of the CA tradition, with some Nepalese manuscripts N, of the G-N tradition, and found the existence of variant readings between the SP manuscripts. Franklin Edgerton 1953 defines these variant readings as dialects. Kern and Edgerton, therefore, proposed the hypothesis that 'the early *Saddharmapuṇḍarīka*

³ Trans. Kumārajīva 406.

⁴ Edgerton 1953.

⁵ Hodgson 1881: 3.

⁶ See Ishida 2016 for an overview of SP manuscript studies, and Yasutomo Nishi 2019-2022 for a comprehensive list of extant SP manuscripts and their romanized texts: <https://www.cari-saddharmapundarika.com/sp-1>. SP manuscript abbreviations for SP manuscripts and their recensions of transcription in Roman script mostly follow the SMSR.

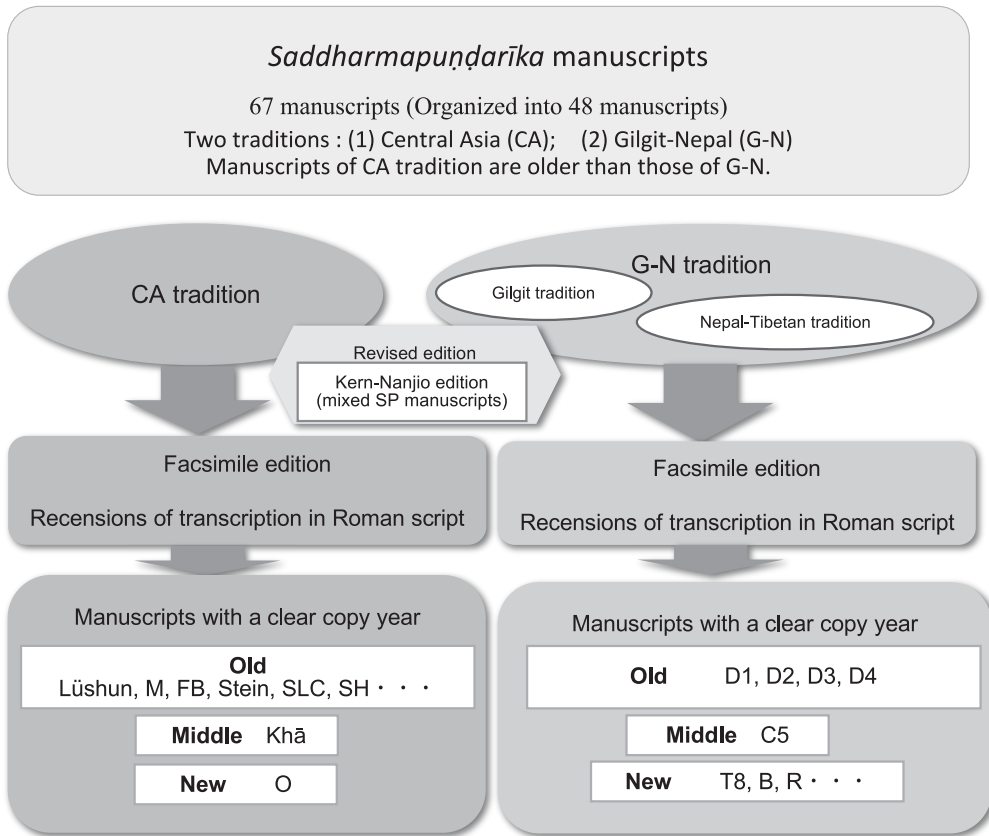


Fig. 1 Traditions of the *Saddharmapuṇḍarīka* manuscripts

near the original was compiled in Middle Indo-Aryan and then Sanskritized while handed down through time.⁷

However, many researchers refute this advocacy. One of them, Naoshiro Tsuji 1970, examined only SP Chapter 3 and suggested what is needed to substantiate Kern-Edgerton's hypothesis. He has only studied the vocabulary of a few manuscripts—the Kashgar manuscript O of the CA tradition and some SP manuscripts of the G-N tradition. He distinguished between the canonical and non-canonical forms of classical Sanskrit, but SP's scholars have had different views.⁸ There is a list of variant readings between the two manuscripts, O and N, given by Kern. Still, there is no detailed examination of the vocabulary or those variant readings. Furthermore, Kern's listing dates from 1912, and many extant SP manuscripts have been found since then.

This chapter deal with the SP manuscripts, focusing on seventeen manuscripts with a pronounced copying age that can be divided into old, middle, and new ages. The possibility that the SP might have been compiled initially under the MIA will be discussed here, along

⁷ H. Kern. "Preface." In Kern-Nanjio edition (KN): I-XII; F. Edgerton. "Buddhist Hybrid Sanskrit." In BHS: § 1.33ff.

⁸ A discussion of the advocacy by Kern 1912, and Edgerton 1953, is detailed in Tsuji 1970: note 5.

Table 1 List of Kern's variant readings: Corresponding terms in Kashgar manuscript O and Nepal manuscript N

	O	N		O	N		O	N		O	N		O	N
1	akīlāsī													
2	akṣobhya	19 akṣobhya	19 aśvagarbha	37 gāna	55 paśyivā	55 paśyivā	74 mahārājebhīh	74 mahārājebhīh						
3	ācintika (in Gāthā)	20 ācintika	20 ācintika	38 gailānya	56 pāramī	56 pāramī	75 mārisa	75 mārisa						
4	atirva	21 ācintika	21 ācintika	39 jānīte	57 pusta	57 pusta	76 mairā	76 mairā						
5	ādāsī	22 ācintika	22 ācintika	40 jātanā	58 prajānāyivā	58 prajānāyivā	77 yānika	77 yānika						
6	ādhardik	23 ādāpāna	23 ādāpāna	41 yusmākam	59 Baḍi	59 Baḍi	78 yusme	78 yusme						
7	anukampāya	24 āptamanah	24 āptamanah	42 ebhīh	60 babhūva (Perf)	60 babhūva (Perf)	79 laya	79 laya						
8	Anuruddha (var. f. Aniruddha)	25 idam artham	25 idam artham	43 nirāhāpēti	61 balasā	61 balasā	80 leḍu / leṣtu (both in Gāthā)	80 leḍu / leṣtu (both in Gāthā)						
9	antaśah	26 upaniśrīya	26 upaniśrīya	44 niryācayati	62 buddhyāpaka	62 buddhyāpaka	81 vāta	81 vāta						
10	antarhita	27 uparimā (dik)	27 uparimā (dik)	45 niśādivā	63 bodhisarvoṇāḍa	63 bodhisarvoṇāḍa	82 vipratyanyā	82 vipratyanyā						
11	labhyantaraka	28 etaka	28 etaka	46 parīṣyanti	65 bhadanta	65 bhadanta	83 viyūha	83 viyūha						
12	āmitābha	29 -ebhīh (Instr. pl.)	29 -ebhīh (Instr. pl.)	47 parājimivā	66 bhāsati	66 bhāsati	84 vedayitavyam	84 vedayitavyam						
13	argata	30 kārapay(m)su	30 kārapay(m)su	48 parāhanimsu	67 bhāṣayisu	67 bhāṣayisu	85 (along with vaipulya)	85 (along with vaipulya)						
14	ārtha (n. g.)	31 kāta / kāḍa	31 kāta / kāḍa	49 parimānasyāmit	68 bhīkṣma	68 bhīkṣma	86 Saradvapūtra (in Ch. I-IV)	86 Saradvapūtra (in Ch. I-IV)						
15	avaropita	32 -kṛvā	32 -kṛvā	50 parīṣyanti	69 bhīyaso	69 bhīyaso	87 (but in Gāthā śraddadhānyanti)	87 (but in Gāthā śraddadhānyanti)						
16	avalokayimsu	33 kevaciropanna	33 kevaciropanna	51 parivābhita	70 bhīyāṣṭaram / bhīyāṣṭaram	70 bhīyāṣṭaram / bhīyāṣṭaram	88 śraddadhānā	88 śraddadhānā						
17	avocūh	34 khaṭṭayati	34 khaṭṭayati	52 parīṣad	71 manāṣāḷānya	71 manāṣāḷānya	89 kāntikāt	89 kāntikāt						
18	āśraddadhānyā	35 Gaja-Kāsyapa	35 Gaja-Kāsyapa	53 buddhā	72 manojha	72 manojha	90 kāntike	90 kāntike						
		36 gavesamāna	36 gavesamāna	54 parivatarājan	73 mahāvīpāni	73 mahāvīpāni	91 viṭṭāni	91 viṭṭāni						

(1) Middle Indo-Aryan (MIA) or Buddhist Hybrid Sanskrit (BHS) as dialects to Classical Sanskrit (Skt). [22]

(2) Conjugating nouns and adjectives in BHS, MIA, or Skt. [10]

(3) Spelling and copying methods specific to manuscripts, etc. [41]

(4) Verbs in different tenses and conjugations [18]

with Sanskritization, and evidence that supports Kern-Edgerton's hypothesis will be shown.

2.3. Kern's 91 variant readings and their classifications

Table 1 lists 91 variant readings between the two manuscripts—the Kashgar manuscript of the CA tradition and the Nepalese manuscript—presented in Kern-Nanjo's first edition of the SP. It classifies these variant readings into four types:

Classification (1): variant readings by MIA or BHS as dialects to Skt. There are 22 such readings.

Classification (2): variant readings by conjugating nouns and adjectives in BHS, MIA, or Skt. There are 10 such readings.

Classification (3): variant readings thought to be due to spelling, copying methods, specific to manuscripts, and the rest. There are 41 such readings.

Classification (4): variant readings of verbs in different tenses and conjugations. There are 18 such readings.

First, this chapter discusses the 22 variant readings in classification (1) MIA or BHS as dialects to Skt.

As examples of this classification, I examined the variant readings of 37. *gilāna* vs *glāna*; 38. *gailānya* vs *glānya*; 71. *mandagailānya* vs *mandaglāna*.

2.4. About *gilāna* : *glāna* / *gailānya* : *glānya* / *mandagailānya* : *mandaglāna*

A close examination of these three sets of variant readings shows that they appear in each SP manuscript, as shown in Table 2. It chronologically distinguishes SP manuscripts of CA and G-N traditions via old, middle, and new-age copying and verse and prose styles. The estimated copying age of each SP manuscript is shown in parentheses.

According to Edgerton's BHSD, *gilāna* is in Pāli, corresponding to the Skt *glāna*, and means "disease." Also, *gailāna* is neither MIA (Pāli) *gilāna* nor Skt *glāna*, so it can be classified as BHS.

Each of the three sets of variant readings appears in fourteen corresponding parts. Of these, four corresponding parts are in the verse, and ten corresponding parts are in the prose. Table 2 shows that MIA and BHS appear more particularly in old-age manuscripts' verses and Sanskrit in new-age manuscripts' prose.

Table 3 shows the number of appearances of (37) *gilāna* vs *glāna*; (38) *gailānya* vs *glānya*; (71) *mandagailānya* vs *mandaglāna* in the two traditions, in chronological order of copying age, verse, and prose. The numbers in parentheses in Table 3 are the number of manuscripts divided by the number of appearances. They represent the average number.

Tables 2 and 3 clearly show that MIA or BHS appear in the verse of the old, middle, and new copying ages of the CA and G-N traditions of SP manuscripts, but Skt does not appear. Moreover, MIA, BHS, and Skt appear in the CA tradition manuscripts in the prose of the old, middle, and new ages, while the G-N tradition, regardless of the old or new copying age, has no MIA or BHS, and only Skt appears. The above makes it clear that when we look at these variant readings, there is a transition from MIA or BHS to Skt in chronological order and use in verse and prose.

This result supports the hypothesis proposed by Kern and Edgerton that the early SP was compiled initially under MIA-like linguistic circumstances and was Sanskritized as it was

Table 2 List of *gilāna* : *glāna* / *gailānya* : *glānya* / *mandagailānya* : *mandaglāna*

CA tradition			G-N tradition								
Ancient Age (5-6 cent.) Lū, M, FB, F1-F8		Middle Age (1064-1065 CE) Kha		New Age (9-10 cent.) O		Ancient Age (6-7 cent.) D1, D2a, D2b, D3a, D3b, D4		Middle Age (1064-1065 CE) C5		New Age (1803-1804 CE) R	
Word	Verse	Prose	Word	Verse	Prose	Word	Verse	Prose	Word	Verse	Prose
1	<i>gilānabhaisajya</i>	M				<i>gilānabhaisajya</i>	D1				
2	<i>gailānyam</i>	F1				<i>glānyam</i> ; <i>gailānyam</i>	D1, D2a, D4		<i>glānyah</i>	3-4b5	<i>glānyam</i>
3	*****					<i>bādhagilāna</i> ^o	D2a, D4		<i>bādhaglāna</i>	3-4b5	<i>bādhaglāna</i>
4	*****					<i>gilānabhaisajya</i>	D1, D4		<i>gilānabhaisajya</i>	58a1	45a1
5	-----					-----	*****		<i>mandaglānatā</i>	79b5	<i>mandaglānatām</i>
6	<i>gilānabhaisajya</i>	FB				<i>gilānabhaisajya</i>	D2a		<i>gilānabhaisajya</i>	91b4	<i>gilānabhaisajya</i>
7	<i>gilānakavam</i>	FB				<i>gilānakavam</i>	*****		<i>gilānavanvam</i>	94b1	<i>gilānakavam</i>
8	<i>mandagailānyatā</i>	FB				<i>mandagailānyatā</i>	D1		<i>mandaglānatā</i>	97b1	<i>mandaglānatām</i>
9	*****					<i>mandagailānyah</i>	D1		<i>mandaglānyah</i>	97b3	<i>mandaglānah</i>
10	<i>glānakā</i>	F3				<i>glānakāntām</i>	D1		<i>glānakā</i>	106a1	<i>glānakāntām</i>
11	<i>glānapratyaya</i> ^o	FB				<i>glānapratyaya</i> ^o	D1		<i>glānapratyaya</i> ^o	110b5	<i>glānapratyaya</i> ^o
12	<i>glānapāna</i> ^o	FB				<i>glānapāna</i> ^o	D1		<i>glānapratyaya</i> ^o	111a3	<i>glānapratyaya</i> ^o
13	*****					<i>glānanām</i>	D1		<i>glānanām</i>	*****	<i>glānanām</i>
14	*****					*****			<i>glānapratyaya</i> ^o	145a3	<i>glānapratyaya</i> ^o

The Central Asia tradition's manuscripts (with approximate copying year)
 Ancient age
 (1) L: the Lüshun Museum Collection (the middle of 5 century)
 (2) M: the Minorov's note of Dutt edition (unknown)
 (3) FB: the Farhad-Beg fragments (around 5-6 century?)
 Middle age
 (4) F1-F6: Stein & Hoernle Collection etc.
 (5) Kha: the Khādaiq (7-8 century)
 New age
 (6) O: the Kashgar (9-10 century)

The Gilgit-Nepalese tradition's manuscripts (with approximate copying year)
 Ancient age
 (1), (2) D1, D2: the National Archives of India (6-7 century)
 (3) D3: the National Archives of India, the British Museum and held by M. A. Shah (7-8 century)
 Middle age
 (4) D4: the Sir Pratap Singh Museum (7-8 century)
 New age
 (5) C5: Add. 1684, the Cambridge University Library (1064-1065CE)
 (6) R: No. 6, Royal Asiatic Society of Great Britain and Ireland, London (1803-1804CE)

Table 3 Distribution of appearances of *gilāna* : *glāna* / *gailānya* : *glānya* / *mandagailānya* : *mandaglāna*

Style	Verse						Prose					
	Central Asia			Gilgit-Nepal			Central Asia			Gilgit-Nepal		
Tradition	Ancient (5-6 cent.)	Middle (7-8 cent.)	New (9-10 cent.)	Ancient (6-7 cent.)	Middle (1064-1065CE)	New (1803-1804CE)	Ancient	Middle	New	Ancient	Middle	New
Age	Lū; M; FB; F1-6	Khā	O	D1; D2a; D2b; D3a; D3b; D4	C5	R	Lū; M; FB; F1-6	Kh	O	D1; D2a; D2b; D3a; D3b; D4	C5	R
Kinds of SP manuscripts												
MIA(Pali)	1		4	4	3	1	2	1	1			
BHS						2	2	1	3			
Skt.												
Appearance (Average)	1 (0.25)		4	4 (1.5)	3	3	4 (1)	1	4	3 (0.75)	9	10
Skt.							3		3	11 (0.67)	9	10

handed down. In other words, the possibility of Sanskritization in SP manuscripts is exceptionally high. I have already presented details of this verification of the 22 variant readings of classification (1) at the 17th WSC2018⁹, the 71st conference of the Japanese Association of Indian and Buddhist Studies,¹⁰ and others.¹¹

3. A contrastive study method of the *Saddharmapuṇḍarīka* and the three Chinese translations using ICT linguistic analysis

3.1. Need for a contrastive study of the *Saddharmapuṇḍarīka* and the three Chinese translations

The *Myōhō-rence-kyō* (the Lotus Sutra) is considered as a Chinese translation of the SP. There has been much study on the Lotus Sutra in Japanese Buddhism since the *Myōhō-rence-kyō* is the essential sutra for many traditional and new Japanese Buddhist religious organizations. As previously mentioned, the source text of its translation is still unknown. There are three existing Chinese translations. These are trans. Dharmarakṣa. 竺法護. 286CE. The *Zheng fǎ huā jīng*. 『正法華經』. *Shō-hoke-kyō* (the Dharma Exalted Sutra); trans. Kumārajīva 鳩摩羅什. 406CE. 『妙法蓮華經』. The *Miào fǎ lián huā jīng*. The *Myōhō-rence-kyō* (the Lotus Sutra); and trans. Jñānagupta 闍那崛多 and Dharmagupta 達摩笈多. 601CE. 『添品妙法蓮華經』 The *Tiān pǐn miào fǎ lián huā jīng*. The *Tenpon-Myōhō-rence-kyō* (the

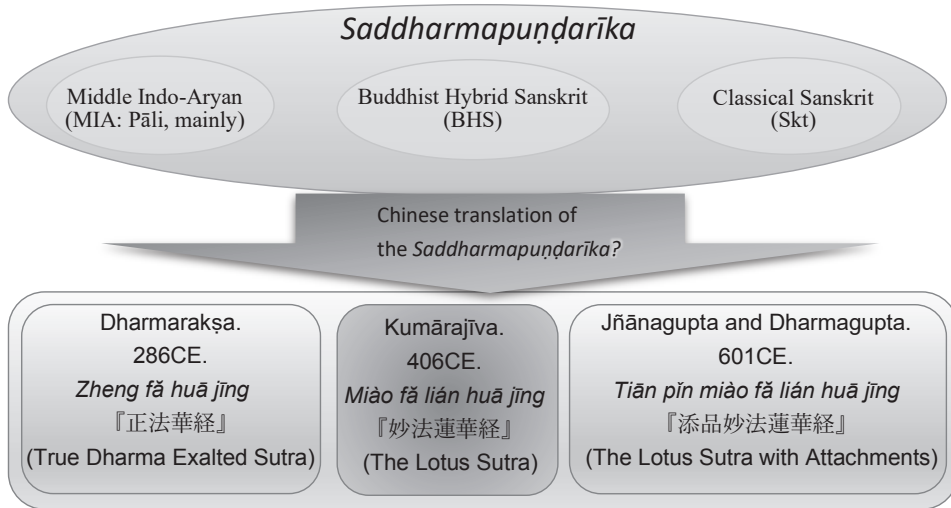


Fig. 2 Three existing translations of the SP into Chinese Translations

⁹ Nishi 2018.

¹⁰ Nishi 2020.

¹¹ See Yasutomo Nishi. 2019-2023. Research and Achievements in A Study of the Sanskrit and Chinese Lotus Sutra: <https://www.cari-saddharmapundarika.com/research-and-achievements>, Academiaedu: <https://min-jp.academia.edu/YasutomoNISHI>, researchmap: <https://researchmap.jp/YasutomoNISHI>. ResearchGate: <https://www.researchgate.net/profile/Yasutomo-Nishi>.

Lotus Sutra with Attachment).

However, among the vast number of SP manuscripts discovered, no manuscripts dating from a copying date before the year of the earliest Chinese translation of the SP have survived, and that source remains unknown. A rigorous contrastive study of the existing SP manuscripts is indispensable for investigating this issue. But an empirical linguistic survey of the SP manuscripts is currently in progress to meet the academic demand for a contrastive study of the Lotus Sutra in Chinese translation.

Due to inadequate linguistic analysis of the lexicon, word forms, grammar, prosody, copying methods, and other facets of the extant SP manuscripts, the Kern-Nanjio edition (1908-1912: KN) is the standard text for SP studies. As a result, even though the KN is lacking in some aspects, many SP studies do not refer to other SP manuscripts but only cite and refer to the incomplete KN published 111 years ago.

3.2. The Kern-Nanjio edition's problems and its revised editions

We can further classify SP manuscript editions into two types: (i) edition texts with mixed SP manuscripts; and (ii) recensions of transcription in Roman script. Type (i) are editions that combine some manuscripts, as in the KN. In order to solve some problems of the KN, three revised editions have been published by scholars. Nevertheless, because they used the same editing method as the KN, KN problems have yet to be eliminated. Fig. 3 is the first page of the Kern-Nanjio edition.

In order to resolve this, it may be necessary to organize the manuscripts one by one. To date, facsimile editions and type (ii) manuscripts have been published, dramatically improving the organization of SP manuscripts. The upper part of Fig. 4 below is a facsimile edition of the SP manuscript Or. 2204, in the British Library's possession, and the lower part is a digitized text of that manuscript's recensions of transcription in Roman script. Type (ii) editions show lexical correspondences with the KN and are revisions only to the corresponding parts—so we have not fundamentally solved the editing problems of the KN. Nevertheless, there is an attempt at systematically classifying the G-N tradition based on type (ii) and a collection of texts that clearly shows the variant vocabulary readings in different manuscripts.

Please see Table 4. There is insufficient linguistic analysis of all 48 types of existing manuscripts beyond the second chapter out of 27 chapters in the SP. SP manuscripts' research is an ongoing process.

The KN (see Fig. 3), published by Johan Hendrik Caspar Kern and Bunyiu Nanjio in five volumes from 1908 to 1912, is the first mixed revision of some SP manuscripts. Many scholars have pointed out the following problems, (a)-(d), regarding the compilation

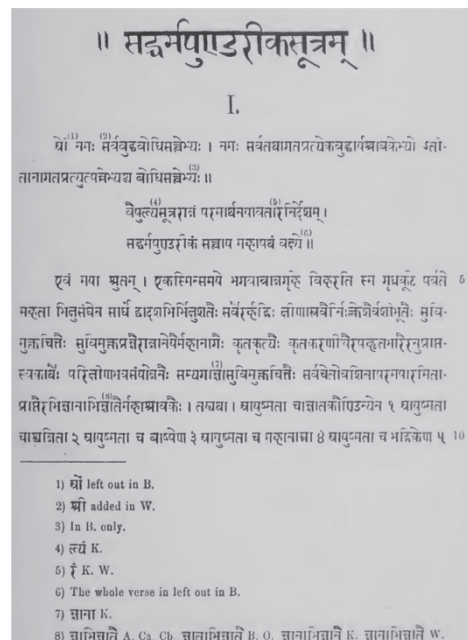


Fig. 3 The first page of the Kern-Nanjio edition

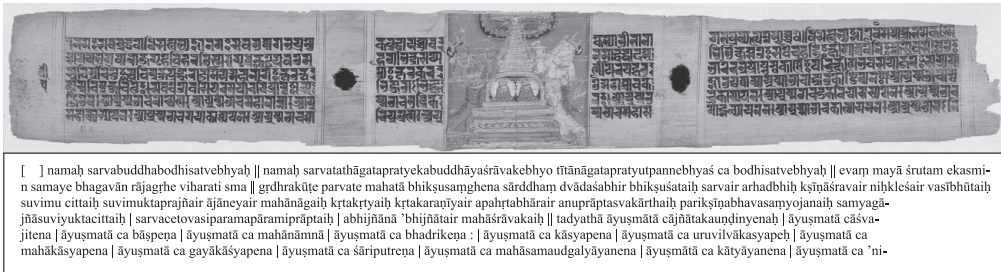


Fig. 4 A sample of a facsimile edition of a *Saddharmapuṇḍarīka* manuscript and its transcription in Roman script

Table 4 Examples of the traditional collection's *Saddharmapuṇḍarīka* manuscript's recensions of transcription in Roman script

KN [1.6]	dvādaśabhi-	bhikṣuśataih	sarvair	arhadbhīḥ kṣīṇāsravair	niḥkleśair	vaśībhūtaiḥ
A [1b2]	dvādaśabhi-	bhikṣuśataih	sarvvair	arhadbhīḥ kṣīṇāsravair	ni kleśair	vaśībhūtaiḥ
B [1b2]	dvādaśabhi-	bhikṣuśataih	sarvair	arhadbhīḥ kṣīṇāsravair	niḥkleśair	vaśībhūtaiḥ
Ca [1b1]	dvādaśabhi-	bhikṣuśataih	sarvair	arhadbhīḥ kṣīṇā[1b2]		vaśībhūtaiḥ
Cb		(lacking)				vaśībhūtaiḥ
K [1b2]	dvādaśabhi-	bhikṣuśataih	sarvair	arhadbhīḥ kṣīṇāsravrva	ni kleśair	vaśībhūtaiḥ
P		(unknown)				
W		(unknown)				
O [6b6]	dvādaśabhi-	mahāśrāvakaśahasraiḥ	sarvair	arhadbhīḥ kṣīṇā-[6b7]sravai	niskleśaiḥ	vaśībhūtaiḥ

Variant readings: different lexicons among the *Saddharmapuṇḍarīka* manuscript's recensions of transcription in Roman script.

*1 KN: Kern-Nanjio edition; *2 A, B, Ca, K, P, W, and O are KN's abbreviation; *3 [1.6], [1b2] and the rest are manuscripts' [page, line]

method used with its 8 SP manuscripts: the Kashgar of the CA tradition and the seven from the G-N tradition.

- (a) The compilation is based on a mixture of some manuscripts without distinguishing between traditions, copying dates, or findsport.
- (b) The criteria for which manuscript lexicon was used in the KN text are unclear.
- (c) Lexicon read differently among manuscripts in the KN footnotes shows that variant readings were not accurately indicated.
- (d) There are many inadequacies in the KN footnotes, such as the lack of reasons for adopting the lexicon.

Three KN revised editions—WT: Wogihara and Tsuchida 1934-1935, Dutt 1953, and Vaidya 1960—attempted to solve these problems, but after examining the text of the KN edition, they mixed in yet another SP manuscript.

Also, in recent years, Ueki 2008 published a work that contrasts only the KN and WT editions among SP manuscripts. It also examines the modern Japanese translations of the KN to date, but it discusses only the combination of the two editions without referring to any other SP manuscript. None of the previous revised editions of the KN has eliminated the editorial problems; thus, it has not become a definitive text. Many SP studies and modern translations rely on the 110-year-old KN—still the most valued standard text for SP studies. In other words, SP manuscript studies have not made much progress.

3.3. An example of the contrast between the *Saddharmapuṇḍarīka* manuscripts and the Chinese translations

Despite the problems with the above SP manuscript studies and their standard text, the

Table 5 *Saddharmapuṇḍarīka* manuscripts' recensions of transcription in Roman script, Kern-Nanjio edition, three Chinese translations

Kern-Nanjio edition		Gilgit-Nepal tradition		Three Chinese translations	
KN	[1.6] mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
R(Th)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
R(SMR)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
R(SG)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
B(Th)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
B(SMR)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
B(SG)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
C4(Th)	[1b1]mahatā	bhikṣusaṃghena sārddham*	dvādaśabhir	bhikṣusataih	
C4(SMR)	[1b1]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
C4(SG)	[1b1]mahatā	bhikṣusaṃghena sārddham*	dvādaśabhir	bhikṣusataih	
C5(Th)					
C5(SMR)					
C5(SG)					
T8(Th)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
T8(SMR)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
T8(SG)	[1b2]mahatā	bhikṣusaṃghena sārddham	dvādaśabhir	bhikṣusataih	
O(Th)	[6b5]maha-[6b6]tā	bhikṣusaṃghena sārddham	dvādaśabhir	mahāsārvakasaḥasraih	
O(SMR)	[6b5]maha-[6b6]tā	bhikṣusaṃghena sārddham	dvādaśabhir	mahāsārvakasaḥasraih	
Central Asia tradition					

Three Chinese translations

『正法華經』(the Dharma Exalted Sutra) (286 CE)
 T0263.09.63a07: 與 大比丘 衆俱。比丘千二百。
 『妙法蓮華經』(the Lotus Sutra) (406 CE)
 T0262.9.1c20: 與 大比丘衆萬二千人俱。
 『添品妙法蓮華經』(the Lotus Sutra with Attachment) (601 CE)
 T0264_9.134c29: 與 大比丘衆萬二千人俱。

Kern-Nanjio edition, many studies contrast only this edition with the Chinese translations of the Lotus Sutra.

Please see Table 5. In the KN edition, there is this:

mahatā bhikṣusaṃghena sārđhaṃ dvādaśabhir bhikṣuśataiḥ,

which means, “there were the 1200 members of the group of the great monks with us.”

The G-N tradition's reading is consistent with the KN, but in the CA tradition there is:

mahatā bhikṣusaṃghena sārđhaṃ dvādaśabhir mahāśrāvakaśahasraiḥ,

which means “there were the 12000 members of the group of the great monks, that is, great śrāvaka with us.” Those are variant readings from the KN. The G-N tradition readings agree with the translation of the Dharma Exalted Sutra 『正法華經』, while the translation of the Central Asia tradition's reading is closer to that of the Lotus Sutra 『妙法蓮華經』, and the Lotus Sutra with Attachment 『添品妙法蓮華經』.

Thus, despite many words whose readings differ from those of the KN and other SP manuscripts, i.e., the existence of variant readings, many studies contrast the KN with the three Chinese translations. A linguistic analysis of all extant SP manuscripts is essential to solving these problems. However, the linguistic analysis of all existing SP manuscripts is an enormous task. To make progress efficiently and without error, we collaborate with information engineers to conduct this research using an interdisciplinary approach.

3.4. Analysis of the *Saddharmapuṇḍarīka* manuscripts using ICT linguistic analysis program tools on PC

We have been working with research collaborators from time to time. In that way, we can promote research related to this study by using additional research methods that combine linguistic research with originally developed linguistic ICT analysis tools that apply information technology. To advance this research efficiently, the PC provides the best and most effective method for language analysis.

To facilitate this approach, we have developed and updated unique fonts that reflect the characteristics of the languages used in SP manuscripts and are necessary to display Romanized versions of SP manuscripts on a PC.¹²

For example, as you know, “ka” is two letters in Roman script, but in Devanāgarī, which represents Sanskrit, it is one letter. So we have created our font [I] that recognizes and displays this as a single character on a PC. The next step was the creation of electronic texts of SP manuscripts in the Roman script: The printed Roman script of the SP manuscript in [II- ①] is ②. We typed the above on a PC with the font in [I], shown in ③. We have created electronic texts of SP manuscripts in Roman script and use analysis tools for the medium.

Furthermore, considering that a serial word index for the vocabulary and word forms of the SP manuscripts, a reverse word index for the grammar of the SP manuscripts, and the results of prosodic analysis for parallel and similar verses and prosody among the SP manuscripts and between the SP manuscripts and other Buddhist texts would be beneficial for

¹² See Yasutomo Nishi. 2019-2022. Research and Achievements in A Study of the Sanskrit and Chinese Lotus Sutra: <https://www.cari-saddharmapundarika.com/research-and-achievements>, Academiaedu: <https://min-jp.academia.edu/YasutomoNISHI>, researchmap: <https://researchmap.jp/YasutomoNISHI>, and ResearchGate: <https://www.researchgate.net/profile/Yasutomo-Nishi>.

[I] Creation and Development of Sanskrit Fonts

अ	आ	इ	ई	उ	ऊ				
a	ā	i	ī	u	ū				
		ए	ऐ	ओ	औ				
		e	ai	o	au				
फ	क	ख	ग	घ	ङ	अः			
f	k	kh	g	gh	ṅ	ah			
						an			
क	ख	ग	घ	ङ					Guttural
ka	kha	ga	gha	ṅa					
च	छ	ज	झ	ञ					Palatal
ca	cha	ja	jha	ña					
ट	ठ	ड	ढ	ण					Cerebral
ṭa	ṭha	ḍa	ḍha	ṇa					
त	थ	द	ध	न					Dental
ta	tha	da	dha	na					
प	फ	ब	भ	म					Labial
pa	pha	ba	bha	ma					
य	र	ल	व						
ya	ra	la	va						
स	ष	स	ह	क्ष	ज्ञ				
śa	ṣa	śa	ha	kṣa	jña				

[II] Creation and Development of Digitized Texts

① Manuscripts (Devanāgarī)



Romanization

② Paperback

1 'namah sarvabuddhabodhisatvebhyaḥ || namah sarvatathāgatapratyeka-
buddhāya śrāvakebhyo 'tītānāgatapratyutpannebhyaś ca bodhisatvebhyaḥ || evam
mayā śrutam ekasmi=
2 n samaye bhagavān rājagṛhe viharati sma || grdrakūṭe parvate mahatā bhi=
kṣusamghena sārddham dvādasabhir bhikṣusataih sarvair arhadbhiḥ kṣiṇāśravair
niḥkleśair vasibhūtaiḥ
3 suvimu(ka)cittaiḥ suvimuktaprajñair ājaneyair mahānāgaiḥ kṛtakṛtyaiḥ kṛtakara=
ṇiyair apahrabhair anuprāptasvakārthaiḥ pariḥkṣiṇabhasamyojanaiḥ samyagā=
jñāsuviyuktacittaiḥ | sarvacetovasiparamapāramiprāptaiḥ | abhijñātā 'bhijñātir
mahāśrāvakaiḥ || tad yathā āyuṣmatā c' ājñātakaṇḍīnena : | āyuṣmatā cāsva=
5 jitenā | āyuṣmatā ca bāṣpēna | āyuṣmatā ca mahānāmnā | āyuṣmatā ca bhadrī=
keṇa : | āyuṣmatā ca (mahā)kāśyapena | āyuṣmatā ca uruvilākasyapena | ā=
yuṣmatā ca
6 mahākāśyapena | āyuṣmatā ca gayākāśyapena | āyuṣmatā ca śāripuṭreṇa | āyu=
ṣmatā ca mahā[sa]maudgalyānena | āyuṣmatā ca (mahā)kātyāyānena | āyu=
ṣmatā ca 'ni=

Text Databasing

③ Digitized texts on a PC

[] namah sarvabuddhabodhisatvebhyaḥ || namah sarvatathāgatapratyekabuddhāyaśrāvakebhyo tītānāgatapratyutpannebhyaś ca bodhisatvebhyaḥ || evam mayā śrutam ekasmi-
n samaye bhagavān rājagṛhe viharati sma || grdrakūṭe parvate mahatā bhikṣusamghena sārddham dvādasabhir bhikṣusataih sarvair arhadbhiḥ kṣiṇāśravair niḥkleśair vasibhūtaiḥ

[III] Program for Generating a Word Index

① Digitized texts

KN [3]76.12-14:
m api na dadyāt tathāpi tāvad bhagavan sa puruṣo na mṛṣāvādī bhavet | tat kasya hetoḥ | tathā hi
bhagavaṃs tena puruṣeṇa pūrvam evaivam anuvicintam upāyakaūśalyeṇāham imān kumārakāṃs tasmān mahato
duḥkhaskandhāḥ parimocayisyāmīti | anenāpi bhagavan paryāyeṇa tasya puruṣaya na mṛṣāvādo

② Serial word index

puruṣeṇa : O(Th)81b7; 82a3; 82b2 -4; 151a7; 305a6;
KN[3]76.13; [3]77.1; [15]317.6
puruṣeṇopāyakaūśalyena : KN[3]76.9
puruṣeṇopāyakaūśalyeṇ : O(Th) 82a6
(puruṣeṇdriyam) : O(Th) 255a2
puruṣeti : KN[13]281.5
puruṣendriyam : KN[11]265.5
puruṣaitan : KN[8]211.6
puruṣair : O(Th) 94b5 : KN[3]89.8
puruṣaitat : O(Th) 200b6
puruṣaitan : O(Th) 201a2
puruṣaiṣamrūpebhi : O(Th) 109b1
puruṣaiṣabhatvam : O(Th) 129b1
puruṣo : O(Th) 77b7; 82a3; 82b1; 93b5; 94b5; 104b2;
106a3; 107a6; 108a6; 114b3; 115b5; 143a6; 150b7.

③ Reverse word index

puruṣeṇa : O(Th)81b7; 82a3; 82b2 4;151a7;
305a6 : KN[3]76.13; [3]77.1;
[15]317.6
satpuruṣeṇa : O(Th)9b6
mṛṣeṇa : KN[15]326.6
'śeṣeṇa : KN[1]6.9
aśeṣeṇa : O(Th)14b3; 239b4
viśeṣeṇa : KN[1]10.8
ekas(v)aranirghoṣeṇa : O(Th)457b7
ekasvaranirghoṣeṇa : O(Th)457b3 : KN[27]486.1
virūpākṣeṇa : KN[1]4.6
virūpākṣeṇa : O(Th)10a5
saikṣeṇa : O(Th)7b7 : KN[1]2.8
śiṛṣeṇa : O(Th)120b1; 270a7 : KN[13]283.11
daridrapuruṣeṇa : O(Th)108a6

[IV] Program for Generating a Pāda Index

Post-analysis digitized text
A pāda
eko 'pi sattvo.na.kadāci.teṣāṃ.l.śrutvāna.dharmaṃ.na.bhaveya.buddhaḥ/J
prañichānam.etad.dhī.tathāgatānāṃ.l.caritva.bodhāya.carāpayeyam/J100/J

A pāda is searched by the generated index

We can quickly find out if there are similar pādas and where to find them.

search results
eko 'pi sattvo na kadāci teṣāṃ : [2]53.100a
eko 'pi satvo na kadāci teṣāṃ : [II](64)(=100)a
ekotsavā vā sukumārakā vā : [2]51.91c
eko vihārī vanakandareṣu : [10]237.33c

[V] Prosody Analysis Program

Digitized text before analysis

eko 'pi sattvo na kadāci teṣāṃ śrūtṡvāna dharmam na bhaveya buddhaḥ |
pranidhānam etad dhi tathāgatānām caritva bodhāya carāpayeyam ||100||

Prosody analysis

Post-analysis digitized text

eko 'pi sattvo na kadāci teṣāṃ śrūtṡvāna dharmam na bhaveya buddhaḥ |
pada1 = eko 'pi sattvo na kadāci teṣāṃ pada2 = śrūtṡvāna dharmam na bhaveya buddhaḥ
Syll = _ _ _ _ _ _ _ _ _ _ : Syll. No = 11 Syll = _ _ _ _ _ _ _ _ _ _ : Syll. No = 11
Neuro Value1 for pada 1 = 11.00308; for pada 2 = 11.001081
Neuro Value2 for pada 1 = 18.000313; for pada 2 = 17.008299;
Neuro Metre for pada 1 = Tristubh; for pada 2 = Tristubh

pranidhānam etad dhi tathāgatānām | caritva bodhāya carāpayeyam ||100||
pada1 = pranidhānam etad dhi tathāgatānām pada2 = caritva bodhāya carāpayeyam
Syll = w _ _ _ _ _ _ _ _ _ : Syll. No = 11 Syll = _ _ _ _ _ _ _ _ _ _ : Syll. No = 11
Neuro Value1 for pada 1 = 11.00308; for pada 2 = 10.997011
Neuro Value2 for pada 1 = 18.000313; for pada 2 = 15.984191;
Neuro Metre for pada 1 = Tristubh; for pada 2 = Tristubh

A pāda B pāda
eko.'pi.sattvo.na.kadāci.teṣāṃ.śrūtṡvāna.dharmam.na.bhaveya.buddhaḥ./ḍ
pranidhānam.etad.dhi.tathāgatānām.|.caritva.bodhāya.carāpayeyam.//100//ḍ
C pāda D pāda

[VI] Programs to Search for Parallel and Similar Verses

A C B D E F ...
A B C D E F ...

Comparing Two Similar Phrases

$1 - (1/26) = 0.96$ (96%)

96% similar

Kern-Nanjo edition		Mahāvastu	Similarity
dharmacakraṃ pravartesi	[3]69.33a	dharmacakraṃ pravartesi 26.26c	1.0000000000
kalpāna koṭīnayutān anantān	[2]32.13c	kalpāna koṭīnayutā anantā 64.233b	0.9259259259
dīpaṃkaraḥ paścimako abhūṣi	[1]27.89b	dīpaṃkaro paścimako abhūṣi 87.17b	0.9230769231
suvārṇavarṇam śatapuṇyalakṣaṇam	[13]295.68a	suvārṇavarṇo śatapuṇyalakṣaṇo 87.1d	0.8709677419
asmiṃl loke paratra vā	[3]70.38b	asmiṃ loke paratra ca 27.79b	0.8571428571
kalpāna koṭīnayutā gaṇanta	[7]192.77c	kalpāna koṭīnayutā anantā 64.233b	0.8461538462

List of *Saddharmapuṇḍarīka* manuscripts in Roman script

KN	[69.15]	dharmacakraṃ	pravartesi	loke apratipudgala
R(Th)	[27b6]	dharmmacakraṃ	pravartesi	loke 'pratipuṅgalaḥ
R(SG)	[27b6]	dharmmacakraṃ	pravartesi	loke 'pratipuṅgalaḥ
B(Th)	[30a6]	dharmacakraṃ	pravartesi	loke apratipudgalaḥ
B(SG)	[30a6]	dharmacakraṃ	pravartesi	loke apratipudgalaḥ
C4(Th)	[22b5]	dharmacakraṃ	pravarteti	loke apratipudgala
C5(Th)	[22b1]	dharmacakraṃ	prava(r)tteti	loke apratipudgalaḥ
C5(SG)	[22b1]	dharmacakraṃ	prava(r)tteti	loke apratipudgalaḥ
T8(Th)	[19b7]	dharmacakraṃ	prava(r)ttesi	loke 'pratipuṅgalaḥ
T8(SG)	[19b7]	dharmacakraṃ	prava(r)ttesi	loke 'pratipuṅgalaḥ
O(Th)	[74b3]	dharmacakrām	pravartesi	loke apratipudgale

analyzing their characteristics, we generated them on a PC through: [III] the Program for Generating a Word Index, [IV] the Program for Generating a Pāda Index, [V] the Prosody Analysis Program, and [VI] Programs to Search for Parallel and Similar Verses.

For the generation of SP manuscript romanization collections by applying [I]-[III], we subjected [II] to the analysis tool to find parallel and similar verses among SP manuscripts on a

PC. In other words, the analysis tool outputs an enhanced text of Romanized SP manuscripts on the PC through: [VI] Programs to search for parallel and similar verses.¹³

[VI] is a list of SP manuscripts used by KN, and this facilitates the discovery of variant readings between many SP manuscripts, which used to be a complicated task. The research method described above may solve the problem of the KN revision that many scholars have pointed out in the past. The results of this study will provide the basic materials necessary for constructing a reliable textual foundation for SP manuscript research. Furthermore, they can be used to deepen the contrastive analysis of the SP with Chinese translations of the Lotus Sutra.

4. Conclusion and future research issues

A projection of the Sanskritization of the *Saddharmapuṇḍarīka* manuscripts based on 91 variant readings in four classifications from Kern's comparison of corresponding terms was a part of chapter 2 of this paper. Apart from the 22 variant readings by MIA or BHS as dialects to Skt of classification (1) that were discussed in the text, there remain the 10 variant readings by conjugation of nouns and adjectives in BHS, MIA, or Skt of classification (2); the 41 variant readings thought to be due to spelling, copying methods, etc., specific to manuscripts of classification (3); and the 18 variant readings of verbs in different tenses and conjugations of classification (4).

The existence of these variant readings may be a different linguistic phenomenon from those that indicate the possibility of Sanskritization in the transmission of the language. The reasons why such variant readings exist in the SP manuscripts are still to be verified, and we hope the results of our research will reveal clues that suggest the transmission process of the SP manuscripts. Nevertheless, a close examination of the distribution of occurrences of the corresponding vocabulary and variant readings treated in this presentation reveals a high probability of a transition from BHS to Skt in the chronological order of the manuscripts and from verses to proses. This result supports Kern-Edgerton's Sanskritization hypothesis.

We encountered the following problems in our previous studies to verify the Kern-Edgerton hypothesis.

- (i) Discernment of the vocabulary of manuscripts of unknown SP copying date.
- (ii) The relevance of the CA and the G-N tradition.

To solve these problems, we believe conducting a more accurate linguistic examination of all extant SP manuscripts is essential using a PC-based linguistic analysis tool program we are developing with our collaborators, including linguistic, word form, word usage, copying, and prosody analysis. By promoting the above, we expect that we may be able to gain a new perspective on the process of establishment and transmission of the *Myōhō-rence-kyō*.

About a contrastive study method of the *Saddharmapuṇḍarīka* (the Sanskrit Lotus Sutra) and the *Myōhō-rence-kyō* (the Chinese Lotus Sutra), using ICT linguistic analysis discussed in chapter 3 of this paper, research using the PC-based linguistic analysis program tools introduced so far will enable us to organize manuscripts based on linguistic evidence and thereby construct a foundation text of the SP. And suppose we contrast the foundation text of

¹³ The numbers in [VI], Programs to Search for Parallel and Similar Verses, are the percentage (%) values obtained by subtracting the Levenshtein distance from one. For detail of the Levenshtein distance, see the following: https://en.wikipedia.org/wiki/Levenshtein_distance (Wikipedia).

the SP with the three Chinese translations. In that case, it will provide reliable primary material for the ideological and historical study of the *Myōhō-rence-kyō*.

We expect to provide reliable basic materials for the ideology and history of the *Myōhō-rence-kyō* and to enable a more rigorous philological reading of the *Myōhō-rence-kyō*'s thoughts. We hope to be able to continue our study of the *Myōhō-rence-kyō* in this way in the future.

〈Acknowledgements〉

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〈Abbreviations, Citations, and References〉

B	Manuscripts. Or. 2204. British Library. London.
B(Th)	Toda's Concordance of B's recensions of transcription in Roman Script.
B(SG)	Ed. Noriyoshi Mizufune. 2011. <i>Sanskrit Lotus Sutra Manuscript from the British Library. (Or. 2204). Romanized Text.</i> Tokyo: Soka Gakkai.
BHS	Buddhist Hybrid Sanskrit.
BHSD	Franklin Edgerton 1953. <i>Buddhist Hybrid Sanskrit Dictionary</i> , Motilal Banarsidass Publishers, Delhi: Motilal Banarsidass Publishers.
BHSG	Franklin Edgerton 1953. <i>Buddhist Hybrid Sanskrit Grammar</i> , Motilal Banarsidass Publishers, Delhi: Motilal Banarsidass Publishers.
C4	Manuscripts. Add. 1683. The Cambridge University Library. Cambridge.
C4(Th)	Toda's Concordance of C4's recensions of transcription in Roman Script.
C4(SG)	Haruaki Kotsuki. 2010. “Appendix. A New Classification of the Nepalese Manuscripts of the Saddharmapuṇḍarīkasūtra (1) Dedicated to Late Dr. Hirofumi Toda.” In ed. Haruaki Kotsuki. 2010. <i>Sanskrit Lotus Sutra Manuscript from Cambridge University Library (Add. 1684). Romanized Text.</i> Soka Gakkai. Tokyo.
C5	Manuscripts. Add. 1684. The Cambridge University Library. Cambridge.
C5(Th)	Toda's Concordance of C5's recensions of transcription in Roman Script.
C5(SG)	Ed. Haruaki Kotsuki. 2010. <i>Sanskrit Lotus Sutra Manuscript from Cambridge University Library (Add. 1684). Romanized Text.</i> Soka Gakkai. Tokyo.
CA	Central Asia.
D1	Manuscripts. Serial No. 45, National Archives of India, New Delhi.
D2a	Manuscripts. Serial No. 44, 45(RL No. 3031, 3032), 47, 49, National Archives of India, New Delhi.

¹⁴ See URL: <https://kaken.nii.ac.jp/en/grant/KAKENHI-PROJECT-21K00058/>.

- D2b Manuscripts. Serial No. 50 (3217-3220), National Archives of India, New Delhi; Toda's Concordance of SG(Group B) 's recensions of transcription in Roman Script.
- D3a Manuscripts. Serial No. 48, National Archives of India, New Delhi and Gil. C8 Or. 11878B, British Museum, London.
- D3b Manuscripts. Serial No. 50 (3121-3216), National Archives of India, New Delhi; Toda's Concordance of SG(Group C)'s recensions of transcription in Roman Script.
- D4 Manuscripts held in the Sir Pratap Singh Museum, Srinagar; ed. Oskar von Hinüber. 1982. *A New Fragmentary Gilgit Manuscript of the Saddharmapuṇḍarīkasūtra*. Tokyo: The Reiyukai.
- F1 Fragments obtained by Petrovsky at Kashgar; Toda. 1983. Part Three II
- F2 Fragments of Stein Collection from Khādalik, India Office Library, London; Toda. 1983. Part Three III.
- F3 Fragments of Stein Collection from the Domoko Region, India Office Library, London and obtained by von Le Coq at Khotan; Toda. 1983. Part Three IV.
- F4 Fragments of Stein & Hoernle Collection from Khādalik, India Office Library, London; Toda. 1983. Part Three V.
- F5 Fragments from an unknown site, India Office Library, London; Toda. 1983. Part Three VI.
- F6 Miscellaneous fragments obtained by Petrovsky at Kashgar, obtained by G. Macartney, Hoernle, obtained by von Le Coq at Shêng-chin, obtained by the Otani expeditions near Khotan, and obtained by the Otani expeditions at T'u-Yü-kou near Turfan; Toda. 1983. Part Three VII.
- FB Manuscripts. No. F. xii, 7, India Office Library, London.; Toda. 1983: Part Two Farhād-Bēg Manuscripts.
- G-N Gilgit-Nepal.
- IABS International Association of Buddhist Studies.
- ICT Information and Communication Technology.
- Khā Ed. Klaus Wille. 2000. *Fragments of a Manuscript of the Saddharmapuṇḍarīkasūtra from Khādaliq*, Lotus Sutra Manuscript Series 3, Tokyo 2000: Soka Gakkai.
- KN Kern-Nanjio edition. Ed. Hendrik Kern and Bunyiu Nanjio. 1908-1912. *Saddharmapuṇḍarīka, Bibliotheca Buddhica X*. St. Pétersbourg: Imprimerie de l'Académie Impériale des Sciences.
- Lü Ed. Jiang Zhongxin. 1997. *Sanskrit Lotus Sutra Fragments from the Lüshun Museum Collection Facsimile Edition and Romanized Text*: Lüshun Museum and Soka Gakkai.
- MIA Middle Indo-Aryan.
- O The *Saddharmapuṇḍarīka* manuscripts of Kashgar.
- O(Th) Ed. Hirofumi Toda. 1983. *Saddharmapuṇḍarīkasūtra, Central Asian Manuscripts. Romanized Text*, Part I Kashgar Manuscript: Tokushima: Kyoiku Shuppan Center.
- P3 Manuscripts. No. 2. Société Asiatique. Paris.
- R Manuscripts. No. 6. The Royal Asiatic Society of Great Britain and Ireland. London.
- R(Th) Toda's Concordance of R's recensions of transcription in Roman Script.

- R(SG) Ed. Haruaki Kotsuki. 2007. *Sanskrit Lotus Sutra Manuscript from the Royal Asiatic Society of Great Britain and Ireland. (No. 6). Romanized Text*. Tokyo: Soka Gakkai.
- Skt Classical Sanskrit.
- SMSR Keisho Tsukamoto 塚本啓祥, Ryugen Taga 田賀龍彦, Ryojun Mitomo 三友量順, Moriichi Yamazaki 山崎守一 and Yoshiyuki Kawazoe 川添良幸. 1986-1988. *Sanskrit Manuscripts of Saddharmapuṇḍarīka Collected from Nepal, Kashmir and Central Asia*. Vol. 1-2 『梵文法華經写本集成ローマ字本・索引』第 1-2 卷. The Society for the Study of *Saddharmapuṇḍarīka* Manuscripts 梵文法華經研究会刊. Tokyo.
- SP *Saddharmapuṇḍarīka*.
- T8 Manuscripts No. 414. The University of Tokyo Library. Tokyo.
- T8(Th) Toda's Concordance of T8's recensions of transcription in Roman Script.
- T8(SG) Ed. KOTSUKI, Haruaki. 2003. *Sanskrit Lotus Sutra Manuscript from University of Tokyo General Library. (No. 414). Romanized Text*. Soka Gakkai. Tokyo.
- Toda's Concordance Ed. Haruaki Kotsuki with the collaboration of Noriyoshi Mizufune. 2003. "A Concordance of Romanized Texts of *Saddharmapuṇḍarīka* Manuscripts Transliterated by Prof. Hirofumi Toda in Reference to the Kern-Nanjio Edition." In ed. Haruaki Kotsuki. 2003. *Sanskrit Lotus Sutra Manuscript from University of Tokyo General Library. (No. 414) Romanized Text*. Soka Gakkai. Tokyo. Appendix II: 256-265.
- WSC World Sanskrit Conference.
- WT Ed. Unrai Wogihara and Chikao Tsuchida 荻原雲来・土田勝弥. 1934-1935. *Saddharmapuṇḍarīkasūtram, Romanized and Revised Text of the Bibliotheca Buddhica Publication by Consulting a Sanskrit MS. and Tibetan and Chinese Translations* 『改訂梵文法華經』. Tokyo: Sankibo Book Store Ltd. 山喜房佛書林.
- Trans. Dharmarakṣa 竺法護. 286. *Zheng fǎ huā jīng* 『正法華經』. *Taishō Tripitaka* 『大正新脩大藏經』 9: 63-134.
- Trans. Kumārajīva 鳩摩羅什. 406. *Miào fǎ lián huā jīng* 『妙法蓮華經』. *Taishō Tripitaka* 『大正新脩大藏經』 9: 1-62.
- Trans. Jñānagupta and Dharmagupta. 601. *Tiān pǐn miào fǎ lián huā jīng* 『添品妙法蓮華經』. *Taishō Tripitaka* 『大正新脩大藏經』 9: 134-196.
- Brian Houghton Hodgson. 1881. Ed. William Wilson Hunter. *Catalogue of Sanskrit Manuscripts, Collected in Nepal, and Presented to Various Libraries and Learned Societies by Brian Houghton Hodgson*. Trübner & Co.; repr. 2009. Kessinger Pub.
- Ed. Nalinaksha Dutt. 1953. *Saddharmapuṇḍarīkasūtram, with N. D. Mironov's Readings from Central Asian MSS. Bibliotheca India. A Collection of Oriental Works, Work No. 276, Issue No. 1565*. Calcutta: The Asiatic Society; repr. 1986.
- Ed. Paraśurāma Lakshmaṇa Vaidya. 1960. *Saddharmapuṇḍarīkasūtram. Buddhist Sanskrit texts*

No.6. Darbhanga.: The Mithila Institute of Post-Graduate Studies and Research in Sanskrit Learning (Buddhist Sanskrit Texts, no. 6).

Naoshiro Tsuji 辻直四郎. 1970. “The Languages Used in the *Saddharmapuṇḍarīkasūtra*” 「法華經の言語」. In ed. Ensho KANAKURA 金倉圓照. *The Lotus Sutra and the Development of Buddhist Thought. Hokekyō no seiritsu to tenkai* 『法華經の成立と展開』. Heirakuji Shoten 平楽寺書店 : 3-21.

Masatoshi Ueki 植木雅俊. 2008. *Saddharmapuṇḍarīkasūtram - translation into the modern Japanese language, with contrast to the Sanskrit, the Chinese translation, and the Japanese translation* 『法華經－梵漢和対照・現代語訳』. Vol. I-II 上・下 : Iwanami Shoten 岩波書店 .

Chiko Ishida. 2016. “A Historical Overview of the Discovery and Study Saddharmapuṇḍarīka Manuscripts.” In Kenyo. Mitomo. 2016. ‘Guiding Lights’ for the ‘Perfect Nature’: Studies on the Nature and the Development of Abhidharma Buddhism A Commemorative Volume in Honor of Prof. Dr. Kenyo Mitomo for his 70th Birthday. Tokyo: (471)492-(507)456.

Yumi Ousaka and Yasutomo Nishi. 2017. “Automatic Analysis of the Canon in Middle Indo-Aryan by Personal Computer IV.” *Bulletin of Chuo Academic Research Institute* (Chuo Gakujutsu Kenkyūjo Kiyō) 46: 97-105.

Yasutomo Nishi.

2018. “Research on *Acintika-*, *Acintiya-*, and *Acintya-* in *Saddharmapuṇḍarīka*.”

2019. “Examining the Sanskritization of the *Saddharmapuṇḍarīka* – A Study of Synonyms in the Text – .” *Journal of Indian and Buddhist Studies* (Indogaku Bukkyogaku Kenkyu) 67(3): 1106(64)-1111(69).

2019-2022. The abbreviations of *Saddharmapuṇḍarīka* manuscripts in A Study of the Sanskrit and Chinese Lotus Sutra: <https://www.cari-saddharmapundarika.com/sp-1>.

2019a. *Saddharmapuṇḍarīka, Central Asian (Kashgar Manuscript) and Gilgit-Nepalese (Kern-Nanjio’s Edition) Recensions of Transcription in Roman Script, Word Index, Philosophica Mahāyāna Buddhica Monograph Series 1*: Chuo Academic Research Institute.

2019b. *Saddharmapuṇḍarīka, Central Asian (Kashgar Manuscript) and Gilgit-Nepalese (Kern-Nanjio’s Edition) Recensions of Transcription in Roman Script, Reverse Word Index, Philosophica Mahāyāna Buddhica Monograph Series 2*: Chuo Academic Research Institute.

2020a. “The Possibility of Verifying Sanskritization in the *Saddharmapuṇḍarīka*: A Study of Kern’s Variant Readings.” *Journal of Indian and Buddhist Studies* (Indogaku Bukkyogaku Kenkyu) 69.3: 1045-1053.

2020b. “A Contrastive Study of the *Saddharmapuṇḍarīka* Manuscripts and the Chinese Lotus Sūtra Using Information and Technology Linguistic Analysis.” *Bulletin of Chuo Academic Research Institute* (Chuo Gakujutsu Kenkyūjo Kiyō) 49: 257-273.

2021b. *Mahāvastu-Avadāna, Pāda Index and Reverse Pāda Index Philosophica Mahāyāna Buddhica Monograph Series 4*. Chuo Academic Research Institute.

2022a. *Saddharmapuṇḍarīka, Kern-Nanjio’s Edition in Roman Script with Complementary Footnotes, Philosophica Mahāyāna Buddhica Monograph Series 6, Kern-Nanjio’s Edition Romanized Text I*: Chuo Academic Research Institute.

2022b. "Promotion of the Philological Empirical Study in the *Saddharmapundarīka* manuscripts: Significance of Deciphering the Original Buddhist Texts." *International Institute for Nichiren Buddhism, Minobusan University* (Minobusan Daigaku Kokusai Nichiren-gaku Kenkyūjo Nichiren-gaku) : 1-12.

2022c. "The Construction of a Fundamental Text for the Clarification of the Problems of the *Saddharmapundarika*: Research Issues in the Kern-Nanjio Edition." *Bulletin of Chuo Academic Research Institute* (Chuo Gakujutsu Kenkyūjo Kiyō) 51: 177-189.

Yasutomo Nishi and Chihiro Mayuzumi. 2022. *Early Buddhist Texts, Mahāvastu-Avadāna, and Lalitavistara Parallel and Similarity Pāda. Philosophica Mahāyāna Buddhica Monograph Series 7*: Chuo Academic Research Institute.