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Kakui's *Hakase-Shi-Kuden-no-Koto* in Modern English Translation: A Window into the Workings of Thirteenth-Century Japanese Buddhist Neumes and a Step Forward for Comparative Liturgy

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Abstract

The present work is a modern English-language translation and annotation of Kakui's (1237-?) *Hakase-Shi-Kuden-no-Koto*, the earliest dated medieval Japanese manuscript to give specific details regarding the design and function of the *go-in bakase*, itself a system of diastematic neumes prevalent in Shingon-sect Japanese esoteric Buddhist circles from as early as the thirteenth century used for recording, as well as recalling, their hymnody. *Hakase-Shi-Kuden-no-Koto* has the secondary distinction of being the earliest dated treatise on Shingon-sect Shōmyō oral transmission of any kind, and it has the tertiary distinction of being, to the translator's knowledge, the only extant medieval Japanese manuscript to provide a comprehensive table of medieval Japanese neumes. The treatise has been preserved in a manuscript in the hand of the eighteenth-century Shingon priest Reizui (ca. 1756). Rezui's copy is currently housed at the Koyasan University Library in Wakayama prefecture, and it is upon this version of Kakui's text that the current translation is based. This translation is intended to provide both a point of entry into the world of Japanese, and indeed East Asian, neume studies for musicologists, and a point of reference in the necessarily collaborative endeavor of internationalizing the field of comparative liturgy. With that in mind, the footnotes include references to neumes from the notational systems of the Latin and Byzantine Christian churches of late antiquity and medieval times that are, to the translator, obvious graphic equivalents to neumes given by Kakui. This is done not to suggest any particular historical interpretation, but rather to identify phenomenological similarities that beckon to be explored for their historico-musicological significance.

Keywords

Japanese Music History – Buddhist Chant – Buddhist Music – Shomyo – Gagaku – Buddhist chant notation – Neume studies – Neumatic notations – Asiatic music historiography – Oriental music

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1 Introduction

It has been over a half century since Walter Kaufmann (1907–1984) first introduced readers of the English language to the neumatic musical notation system most prevalently used, from as early as the thirteenth century, to record, as well as to recall, the hymnody of Shingon-sect Japanese esoteric Buddhism.[1] That system was and is known as the *go-in bakase*[2]. Since Kaufmann's short article that appeared in the journal *Ethnomusicology* in 1967, very little has been written on the subject of the historical development of the *go-in bakase* system.[3]

That this should be the case for the English-language literature is perhaps unremarkable given the remoteness of this topic for most musicologists of whom that tongue is native, but the dearth of related historical studies in Japanese is striking, if not only because of the appearance of the *go-in bakase* system as a topic in many Japanese-language introductions to traditional Japanese music history and practice.[4]

In such introductory works, the Shingon priest Kakui (1237-?) is generally credited as the originator of the *go-in bakase* system. Little else is known about Kakui, and perhaps the lack of extant details pertaining to his life is a contributing factor to the aura of obscurity surrounding the origins of the fascinating system of musical notation that he supposedly devised and most assuredly championed. Be that as it may, Kakui did write a short treatise detailing many of the aesthetic and functional features of the *go-in bakase* system, and that treatise has been preserved in a manuscript in the hand of the eighteenth-century Shingon priest, Reizui (ca. 1756). The treatise in question is the *Hakase-shi-kuden-no-koto*, of which the present work is a translation.

2 Towards an internationalization of comparative liturgy

This translation is intended to provide a point of entry into the world of Japanese, and indeed East Asian, neume studies for musicologists. The diastematic *go-in bakase* system is considered both a

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1 See Kaufmann 1967: 161–69.

2 The initial consonant of the word '*bakase*' from the compound '*go-in bakase*' is voiced as a result of the rules of euphonic combination in the Japanese language, which dictate that the first syllable '*ha*' of the word '*hakase*', become voiced when following the nasal 'n', here the last mora of the compound '*go-in*'; thus '*go-in hakase*' becomes '*go-in bakase*'.

3 By far, the most detailed account of the development of neumatic notations for Japanese Buddhist chant can be found in Arai 1996. In this article, in both its Japanese and English (translated by Steven G. Nelson) versions, an historical account is given for the development of the various types of neumatic notations used in the Shingon and Tendai sects of Japanese Buddhism, but an in-depth look at the individual neumes and specific melodic types represented by them is not attempted. An excellent introduction to the *go-in bakase* system can be found in Nelson 1998: 458–503.The *go-in bakase* system is also described in Malm 2000: 279–81 and Harich-Schneider 1973: 329. These two authors, though referencing the *go-in bakase* system, give few details about its historical development. Finally, an interesting theory for an Indian origin of the various Buddhist notational systems of Japan, Nepal, and Tibet, is given in Ellingson 1986: 302–42.

4 See, for example, Sawada 2008: 126.

functional and aesthetic development of the older, cursive, adiastemtaic, and strictly graphic *fushihakase* notations.[5] That the latter have continental origins was demonstrated in 1993, when graphically equivalent neumatic notations were discovered affixed to the Chinese text of a *gāthā*, as preserved in a tenth-century manuscript fragment from Dunhuang secured by Aurel Stein (1862–1943) and currently housed in the British library.[6] Chinese precedent for the *fushihakase* notations had already been hypothesized by Kaufmann who, having also noted significant graphic similarities between the neumes of Tibetan Buddhist chant and those of the Syriac, Byzantine, Armenian, and Latin Christian churches, suggested that such graphic similarities were ultimately the result of interactions between Buddhists and Christians on the Silk Road.[7]

To Kaufmann's point, there were ample opportunities for exchange between, at the very least, Nestorian Christian missionaries from Persia and Tibetan and Chinese Buddhists in Central Asia. Beginning in the late seventh century, the Tarim Basin was the centre of territorial disputes between the Tibetan empire and Tang Dynasty China, and the existence of neumatic notations with links to the Nestorian church in this area was confirmed in the early twentieth century with the discovery, among the Turfan manuscripts, of Sogdian-language Manichean hymns furnished with ekphonetic signs of the kind devised around the year 500 by the Nestorian hymnographer Joseph Hûzâjâ.[8]

Interestingly, the Nestorian neumes very much resemble the diacritical marks used to indicate the tones of Middle Chinese, known as *sìshēng* in modern Chinese and *shisei* in Sino-Japanese, which are themselves a feature of Buddhist chant scores in both the ancient Chinese and Sino-Japanese traditions.[9] For example, in Japanese scores dating from as early as the eleventh century, such tone

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[5] See Arai 1996a.

[6] See Kobayashi 2014: 173–76. The word 'gāthā' here refers to a verse portion of a Buddhist text. The text in question is the so-called Lotus Sutra (Skt. *Saddharma-puṇḍarīka-sūtram*, Ch. *Miàofǎ-Liánhuá-jīng*, Jp. *Myōhō-Renge-Kyō*) and in particular, its twenty-fifth chapter, "The Universal Gateway of Avalokiteśvara Bodhisattva" (Ch. *guānshìyīn-púsà-pǔmén-pǐn,* Jp. *kanzeon-bosatsu-fumon-bon*). This chapter is often recited separately from the larger text in East Asian Buddhism, in which case it is known by a contraction of its longer title as the 'Avalokiteśvara sutra' (Ch. *guānyīn-jīng*, Jp. *kannon-kyō*). The manuscript fragment in question is S.5556 from the Stein collection at the British Library. The discovery of the Dunhuang neumes was followed, in 2000, by the discovery of neumes affixed to a Buddhist treatise in the hand of the Korean monk Wonhyo (元曉, 617–686). This treatise, the *Hanpiryōron* in Japanese or *Panbilyanglon* in Korean (判比量論), was imported to Japan in the eighth century from the Korean kingdom of Silla, a vassal state of Tang Dynasty China. From this time it was in the possession of the Japanese Empress Kōmyō (光明皇后, 701–760).

[7] See Kaufmann 1967: 360. Although the earliest extant Tibetan Buddhist chant part books with graphic notations date from the late eighteenth century, a thirteenth-century treatise on music by the renowned Tibetan scholar Sakyapandita (1182–1251) seems to describe, by way of simile, a number of signs for the notation of Buddhist chant. See Canzio 1978: 74–75.

[8] For a table of the Nestorian neumes, see Wellesz 1978a: 10. The neumes from the Manichean hymn unearthed in the Tarim Basin represent an early phase of Hûzâjâ's notational system. Also note that the Turfan manuscripts included Nestorian texts.

[9] Traditionally in China, the creation of the tone markings has been attributed to the great poet, musician, and statesman, Shěnyuē (沈約, 441–513), although the earliest extant specimens of the tone markings date to the late eighth and early ninth centuries. For more on this, see Ishizuka 1993: 30–50.

markings are used in conjunction with the *fushihakase* in indicating melodic contour.[10] This convention can be shown to have continental origins, as is evidenced by the fact that the neumes from the aforementioned manuscript fragment from Dunhuang emanate from the spaces usually occupied by the tone markings. Hence, there seems to be a developmental relationship between such tone markings and the various neumatic notational systems of East Asia in medieval times. This relationship can be traced back to Dunhuang which, as the gateway from Central to East Asia and the nexus of the Silk Roads, was an area that would have been well traversed by missionaries of the Nestorian Church.

Just as there is, as demonstrated by Kaufmann, substantial overlap in the graphic forms assumed by neumes in the Tibetan Buddhist and various medieval Christian notational systems, there are also significant graphic correspondences between the early East Asian neumes and, for example, those of medieval Latin Christendom. Both the *fushihakase* and their Chinese precedents appear in straightened, upward bending, downward curving, and undulating varieties graphically identical to the prototypical forms of the Carolingian *virga*, *podatus*, *clivis*, and *torculus*, respectively. When one takes into account the East Asian tone markings, considering them to be, as they were, integral to the early East Asian neumatic notational systems, the total number of graphic forms in those systems comes to five, with the fifth sign being graphically equivalent to the Carolingian *punctum*. Hence, each member of the Carolingian system of neumes is represented by a graphically equivalent neume in the early East Asian neumatic notational systems.[11]

The Japanese *fushihakase*, along with the later diastematic *go-in bakase* system, shares with the notational systems of both contemporaneous Gregorian and Tibetan Buddhist chant the use of what might be called ligatures.[12] That is, a single text syllable may be furnished with a series of neumes. In the *go-in bakase* system, a single stroke of such a ligature is at times realized with an additional melismatic motif or melodic embellishment. These embellishments are left unnotated, and their intervallic content and timing have been passed down orally. This oral transmission has been aided by a descriptive manuscript tradition, to which Kakui's treatise belongs.

If indeed there are historical connections between the East Asian, Tibetan, and various Christian neumes of medieval times, then the melodic embellishments in the current traditions of Shingon-sect Buddhist chant, when considered in conjunction with their textual descriptions in the

[10] For a description of the relevant Japanese manuscripts, see Numoto 1991: 45–74. In both the Chinese and Sino-Japanese traditions of transliterating Sanskrit with Chinese characters, the tone markings were also used to indicate the vowel lengths of the transliterated Sanskrit syllables. For more on this, see Numoto 2011: 3–18. The tone markings continue to appear, albeit superflously, in modern Japanese Buddhist chant scores utilizing the diastematic *go-in bakase* system. In this context, the departing tone, when it is indicated, is done so with a dot in the upper right-hand corner of the Chinese character in question, and this generally corresponds to a melodic ascent; this is mirrored in the Nestorian neumes, in which a dot in the top right-hand corner of a word likewise represents a melodic ascent. The dots of the Nestorian neumes are at times doubled or tripled; in similar fashion, the Sino-Japanese tone markings are doubled on occasion, and this typically indicates a voiced, as opposed to an unvoiced, initial consonant in the relative text syllable.

[11] See Appendix I.

[12] See Canzio 1978: 61–64. The thirteenth-century Tibetan neumes, of which we have only textual descriptions, seem to have been used singularly as well as in compound.

manuscript tradition, may have the potential to inform our interpretation of certain functionally ambiguous neumes and to explain gaps between theory and practice in and between the differing systems.

Whether or not the various notational systems mentioned above at one time shared functional, in addition to their conspicuous graphic, similarities, there can be no doubt that a better understanding of Kakui's neumes and the melodic features they represent will improve our understanding of East Asian neumatic notational systems overall. Aside from Kakui's treatise, the author knows of no other ancient or medieval Japanese manuscript that gives a comprehensive table of the medieval Japanese neumes in either their curved or straightened forms, and the table of neumes provided by Kakui in the section of the present translation entitled "A List of *Hakase* Graphs" will be an indispensable point of reference in the necessarily collaborative endeavour of internationalizing the field of comparative liturgy. Contributing to such internationalization is, then, the *raison d'être* of the present work.[13]

With that in mind, the footnotes include references to neumes from the notational systems of the Latin and Byzantine Christian churches of late antiquity and medieval times that are, to the translator, obvious graphic equivalents to neumes given by Kakui. This is done not to suggest any particular historical interpretation, but rather to identify phenomenological similarities that beckon to be explored for their historico-musicological significance.[14]

3 Primary materials and their accessibility

The esoteric nature of Shingon Buddhism is often cited as a significant impediment to research on its musical practices, but the assumed insuperability of this barrier is quite contrary to the author's experience, who has been asked to comment on how the closed-off nature of the sect in question has affected the compiling of the present translation.

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[13] Both the Tibetan and Japanese Shingon traditions belong to the Mahāyāna Buddhist tradition. To the author's knowledge, the earliest description of anything resembling a liturgical form in the Mahāyāna Buddhist context can be found in the *Dharmasaṃgraha*, an ancient collection of Buddhist technical terms attributed to Nāgārjuna (150–250). Here, the ceremony known as the "Seven Supreme Offerings" (Skt. *Saptavidhānuttara-pūjā*) is introduced. Its component parts are the *vandanā* (worshipping), *pūjanā* (honoring), *pāpadeśanā* (confessing), *anumodanā* (rejoicing), *adhyeṣaṇā* (requesting instruction), *bodhicittotpāda* (generating a mind set on awakening), and *pariṇāmanā* (developing the mind set on awakening). A truncated version of the *Dharmasaṃgraha* in a Chinese translation (*Fúshuō-fǎjí-míngshù-jīng*) by the Indian monk Dānapāla (d. 1017) was known in East Asia. Some of Dānapāla's terms for the component parts of the "Seven Supreme Offerings" (七種最上供養, Ch. *qī-zhǒng-zuìshàng-gòngyǎng*, Jp. *shichi-shū-saijō-kuyō*) appear as piece titles in the repertoires of the Japanese Shingon and Tendai Sects. Especially notable in this regard is the 'suite' of confessional pieces known, in both sects, as the *gokai* (五悔). The titles of four out of five of the Shingon *gokai* pieces , namely, the *sange* (懺悔), *zuiki* (随喜), *kanjō* (勧請), and *ekō* (回向), match terms used by Dānapāla to translate *pāpadeśanā, anumodanā*, *adhyeṣaṇā*, and *pariṇāmanā* respectively. All four of these appear in the Tendai *gokai* where a fifth piece, the *hatsugan* (發願), corresponds to Dānapāla's translation of *bodhicittotpāda.*

[14] For a comparison of the Tibetan Buddhist and various Christian neumes, the reader is enthusiastically referred to Kaufmann 1967: 410–13.

Indeed, being a true 'practitioner' of Shingon Buddhism is to have been entered into holy orders; lay believers are simply not given access to the full spectrum of ritual practices. The injunction against divulging ritual secrets in the Shingon tradition is an ancient one that can be traced back to seventh century India. The *Vajraśekhara Sūtra*, for example, includes the following description of a rite designed to ensure the mystical and spontaneous death of a disciple upon their breaking of trust.[15]

"[Then] the Adamantine Ācārya (Teacher) should himself bind the *sattva-vajrī* seal, which he places facing downward on the disciple's head, making the following pronouncement: 'this is the *samaya-vajra* (pledge-*vajra*). It will split your head [if you talk about this to others, so] you must not speak of it.'"

Despite the thus attested severity of repercussions incurred for divulging secret matters in the esoteric Buddhist traditions of ancient times, a substantial portion of the chant repertoire of today's Shingon sect is accessible in Japan through commercially available recordings. Also, medieval notation manuals are extant and increasingly accessible to local and foreign researchers alike. This is in no small part due to the noble archival and publication efforts of scholars such as Professor Steven G. Nelson and the late Kazuo Fukushima, both of the now disbanded Research Institute for Japanese Music Historiography at Ueno Gakuen University. Recent digitization efforts in Japan are also contributing to the publication of materials germane to this field, though these continue to proceed at an unhurried pace.[16]

The interpretation of notational manuals, many of which have been published in facsimile form, is greatly informed by consulting the contemporaneous oral-transmission manuscripts (Jp. *kudensho*, 口伝書). A number of these are held by the Koyasan University Library and date from as early as the eigtheenth century with colophons indicating textual origins in as early as the thirteenth century, as in the case of the manuscript used in the present translation. Being affiliated with a university in Japan is helpful in gaining access to such primary source materials, but not necessary, especially if one has obtained the proper recommendation. Finally, compilations of modern notations published in conjunction with audio recordings, though mostly out of production, are available on the old books market in Japan.[17]

As such, examination of the relationships between the current chanting practices of the Shingon sect and their corresponding contemporary, as well as forbearing medieval, musical notations, is well within the grasp of any sufficiently motivated musicologist whose level of interest and leisure is commensurate with that required for gaining facility in classical Japanese, classical Chinese, and Sanskrit, and for spending some time in Japan to identify, peruse, and allocate materials. All

[15] Giebel 2001: 76. In the Japanese Shingon and Tendai traditions, this sutra is known as the "Adamantine Pinnacle Sutra" (Jp. Kongōchō-kyō 金剛頂経, Skt. *Vajraśekhara Sūtra*), and its contents are equivalent to those of what in the continental esoteric Buddhist traditions was the first chapter of the much longer "Compendium of Principles of All the Tathāgatas" (Skt. *Sarvatathāgatatattvasaṃgraha*).

[16] For an extensive account of recent digitization projects of musicological significance in Japan, see Tsukahara 2022: 669–79.

[17] See for example, Kuriyama and Koizumi 1998.

the better if one devotes a portion of said time to acquiring the relevant academic, if not clerical, connections in Japan. There is much work to be done in this field, and generating interest locally is as much of an endeavor as is generating it abroad. Having spent the good part of a decade doing the former, the author, with the present translation, seeks to make progress on the latter.

4 Regarding pitch and scales

Throughout this translation, the five pitches of the anhemitonic pentatonic scales used in Japanese Buddhist chant, or *shōmyō,* are given in their Sino-Japanese nomenclature.[18] The five scale degrees are 'kyū', 'shō', 'kaku', 'chi', and 'u'. Though pronunciation obscures the fact, these are nominally equivalent to the Chinese scale degrees 'gōng', 'shāng', 'jué', 'zhǐ', 'yǔ', written as they are using the same Chinese characters, but there is a crucial difference with regards as to how they are employed in the Japanese context. In the Chinese system, the basic scale can be systematically rotated such that the sequence begins on any of the five scale degrees, thus rendering five different versions of the anhemitonic pentatonic sequence. In the medieval Japanese tradition however, only two of these possible sequences were used, and these were and are referred to as the *ryo* and *ritsu* scales, respectively. In terms of the Chinese scales just previously mentioned, the *ryo* scale is equivalent to that beginning on the pitch 'gōng', and the *ritsu* scale to that beginning on the pitch 'zhǐ', but in Japanese practice both scales begin on the pitch 'kyū'. That is, both scales, despite their differing intervallic sequences, are expressed by the terms 'kyū', 'shō', 'kaku', 'chi', and 'u', in that order.

Both the *ryo* and *ritsu* scales are, in theory as well as in practice, transposable to any starting definite pitch, and as such may perhaps be most unambiguously expressed in terms of their pitch names separated by Arabic numerals representing the number of intervening half-steps between pitches. In doing so, the *ryo* scale comes to be represented as 'kyū' [2] 'shō' [2] 'kaku' [3] 'chi' [2] 'u', and the *ritsu* scale as 'kyū' [2] 'shō' [3] 'kaku' [2] 'chi' [2] 'u'. Note that the distance from a lower member 'u' to an upper member 'kyū' in both scales is three half-steps. This modal theory must be taken into account when working with the *go-in bakase* notational system, as the intervals represented by, say, a *hakase* graph indicating movement from 'shō' to 'kaku', or perhaps from 'kaku' to 'chi', will differ depending upon which of the scales, *ryo* or *ritsu*, is intended for the particular piece or section thereof in question.[19]

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[18] Until the late Heian period, the term *shōmyō* in Japan, as well as in China, referred not to Buddhist chant per se, but rather to one of the five ancient Indian sciences (Skt. *pañcavidyā*), namely, that one dedicated to the study of language and phonetics, *śabdavidyā*. It seems that Buddhist chant was covered in the rubric of *śabdavidyā* in such a way that is reminiscent of the way in which Vedic chant was central to the *śikṣa* literature, the study of phonetics in the Brahmanical tradition. Perhaps for this reason, overtime, *shōmyō* became a catch-all term for Buddhist chant in Japan, a convention that continues to the present.

[19] The *ritsu* or *ryo* status of any particular piece is not typically indicated in medieval scores of the Shingon sect, but it is so indicated in the contemporaneous *kudensho* literature. Also note that the specific mode intended for a particular piece may vary between the Shingon and Tendai sects, as do the actual melodies

5 Notes on the translation

Hakase-shi-kuden-no-koto is the earliest work to give specific details regarding the design and function of the *go-in bakase* system. In addition, it has the secondary distinction of being the earliest dated treatise on Shingon-sect Shōmyō oral transmission of any kind. [20] The manuscript itself is housed at the Kōyasan University Library in Wakayama prefecture, Japan, and a facsimile has been provided as an appendix to the present translator's own master's thesis, completed at the Tōkyō University of the Arts in 2017.[21]

The majority of Kakui's text is written in a classical Chinese that is annotated in such a way that it may be read aloud in the classical Japanese register. Such a style of writing would be known as *kanbun-kundoku* to students and specialists alike in the field of Japanese literature. The often terse nature of this writing style is one of the reasons that the present translator has avoided a too literal translation.

Another reason for the present translator's eschewing of a strictly word-for-word rendition is the highly contextualized nature of the text which concerns, by definition, a topic of an esoteric nature.[22] To help alleviate much of the guess work that would otherwise be involved in reading a too literal translation, contextualizing text has been added by the translator based on his personal knowledge of the Shōmyō *kudensho* literature ascertained by him from over a decade of working with that particular genre of texts in Japan.

There are exceptions to the generally liberal style of translation employed here. For example, the reader may at once detect a sense of awkwardness in the choice of the verb 'indicate' to refer to the action of affixing *hakase* graphs to texts. In fact, this word has been consciously selected to represent the Japanese word used by Kakui himself in referring to that very same action. The word in question is 'sasu', and it is written with the same Chinese character as is the Sino-Japanese word 'shi' from the text's title, *Hakase-shi-kuden-no-koto*.[23] This character, in both Japanese and Sino-Japanese contexts, refers to indication with the fingers, that is, to the act of pointing, and its use in the context of notating Buddhist chant may very well have its origins in the method of Sāmavedic cheironomy hypothesized by Kaufmann as being the predecessor to, if not only the inspiration for, the development of the *go-in bakase* graphs. For this reason, and to preserve a nuance latent with historical possibilities, the present translator has opted to use, in a quite literal fashion, the word 'indicate' throughout the body of the translation to substitute for the Japanese word 'sasu'.

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and notational systems employed to dictate those melodies. The present translation uses as its point of reference the Shingon repertoire.

[20] Treatises such as these are known in Japanese as *kudensho*, a term that literally means 'oral transmission text'. These texts, though befitting their collective appellation, do so not without a sense of irony in that they make a written record of what is, in principle, an oral transmission.

[21] Duran 2017.

[22] The topic is 'esoteric' in both the general sense of that word, in that its scholarly exploration requires specialized knowledge, and also in the technical sense, insofar as it concerns the ritual of a sect of Buddhism that emphasizes 'secret teachings' (Jp. *mikkyō* 密教) as opposed to open ones (Jp. *kengyō* 顕教).

[23] The character referred to is "指".

The manuscript used in this translation, dated to 1756, contains a number of notes by the priest Reizui, a man of whom, in similar fashion to Kakui, very little is known except that he gave himself quite thoroughly to the transmission of the teachings of the Nanzan-shinryū branch of Shingon-sect Shōmyō, as is evidenced by the proliferation of treatises, such as the present one, bearing his name as copyist. Reizui's notes have been excluded from the present translation, as are the treatise's accompanying appendices, which though elucidating certain topics covered in the body of the main text, were not penned by Kakui himself and are by all estimations a part of a much later tradition, perhaps even that of the eighteenth-century copyist. On the other hand, this translator has provided in the footnotes to this translation and in four of the five appendices that follow it information that will enhance the reader's understanding of principles discussed in the treatise.

Each section of the translation that follows is prefaced with a heading given in bold print. Some of these are translations of Kakui's own headings, but not all. A number of them have been penned by the present translator, and an even larger number are English translations of those given by Atsuko Sawada in her 1985 Japanese-language article which introduced the content of Kakui's treatise to readers of modern Japanese.[24] These same headings were used in the present author's own modern Japanese translation and annotation of Kakui's treatise, which to this translator's knowledge is, excepting the present work, the first and only complete translation of the treatise into any modern language to date.[25] Reizui was not the only priest to copy Kakui's text, and there is undoubtedly much to learn from a comparison of various copies of Kakui's treatise. However, Reizui's copy is a key source of Kakui's work and an excellent starting point for understanding his notational system.

6 Kakui's *Hakase-Shi-Kuden-no-Koto* in English translation

6.1 Regarding the arrangement of hakase graphs in the central vocal register[26]

Among the five pitches of the central vocal register, 'kaku' is central. The position of the *hakase* graph of 'kaku' determines that which is above and below, namely, the positions of the adjacent *hakase* graphs. Despite this, the *hakase* graphs representing the pitches 'u' and 'chi' should be indicated in a slightly sagging manner, and those representing 'kyū' and 'shō' in a slightly raised manner. A fitting example of this is the character 'ground' in the *Rishukyō*, from a section of text in which the characters are cramped.[27]

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[24] See Sawada 1985: 91–103. Sawada's article, though not including a modern Japanese translation of Kakui's text, does provide a transcription of the classical Japanese one, as well as some useful commentary.

[25] In retrospect, that translation is at places so free that it might be considered a simultaneous annotation and translation. The current translation is meant to supersede the former one in terms of its literality, but not in regards to its accompanying commentary, which differs in both focus and breadth.

[26] Those unfamiliar with the basic layout and method of reading the *go-in bakase* graphs are referred to Appendix II.

[27] "Ground" here refers to the character "地". For an example of this passage in notation, see Appendix III. Here, the second *hakase* graph, though indicating the pitch 'u' does not appear at a 90-degree angle as it

6.2 Regarding the arrangement of hakase graphs in the lower and upper vocal registers

There are times when a *hakase* graph must be indicated beyond what would be its usual position.[28] One of the best examples of this from the hymnal is the character 'life' from the compound word 'long life' in the piece *Ungabai*.[29] When the character 'life' is to be intoned on the pitch 'u', the *hakase* should be drawn as if to indicate the pitch 'kyū'. The reason for this is that the *hakase* graph for the character 'life', a character that is intoned in a prolonged and melismatic way, is very long; if it, that is, the pitch 'u', were indicated as would be expected with the *hakase* graph for 'u', that *hakase* graph would brush-up against the other characters.

Another example of when a *hakase* graph should be indicated in such a way that it extends beyond its usual position, this time in contrast with the previous example in a raised fashion, is the phrase "wondrous and unsurpassed flowers that are in the ten directions" from the piece *Bonnon*.[30] Here, the *hakase* graph that seemingly indicates the pitch 'u' and is affixed to the character 'are', is similar to the previous example in that it should be intoned at a different pitch than warranted by its position. This pertains to the pitch 'kyū' from the central vocal register.[31]

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theoretically should, but rather, it is tilted slightly to the left. Note, '*Rishukyō*' refers to the Chinese translation by the Samarkandian priest Amoghavajra (705–774) of the tantric Buddhist text known in Sanskrit as the *Prajñāpāramitā-naya-śatapañcaśatikā sūtra*. The text, in Amoghavajra's translation, is central to Shingon theology.

[28] The point here is that, for aesthetic and practical reasons, there are times when *hakase* graphs indicating the lower and upper vocal registers cannot be written in their theoretically standard positions; that is, the upper register cannot be indicated revolving upwards and clockwise around to the right of the character, and the lower register cannot be indicated revolving downward and counterclockwise, again around to the right of the character. Although so indicating the *hakase* graphs would be theoretically correct, the spatial limitations of a Buddhist hymnal (Jp. *shōmyōshū*, 声明集) requires that these *hakase* graphs be repositioned, for the most part being placed in what would normally be occupied by *hakase* graphs indicating the central vocal register. To get a sense of what is being discussed here, as well as in the following examples given by Kakui, please refer to Appendix IV.

[29] 'Ungabai' is a representative piece from a wider genre of pieces known as 'Bai'. The 'Bai' is but one in a group of four genres, the other three being the 'Sange', 'Bonnon', and 'Shakujō', that constitute the *Shikahōyō*, a four-part section of the Sino-Japanese Buddhist liturgy that fulfills an offertory function. A truncated version of this offertory section, and one excluding the latter two genres, is known as the *Nikahōyō*. Also note, this translator uses the word "hymnal" here to translate the word "Shōmyōshū", which might as well have been translated as "Compilation of Buddhist chant", but has not been so, on account of, and in preference for, the tone of familiarity invoked by the word 'hymnal'. Finally, the text "long life" here translates the Sino-Japanese "長寿", meaning 'longevity'. The translation "long life" has been opted for in order to distinguish the two characters of the original compound from each other, hence enabling, for explanatory purposes, the isolation of the character "寿", or 'life', of which the notation is being explained in the passage.

[30] The *Bonnon* is the third member of the group of four-pieces that taken together constitute the *shikahōyō* offertory section of the liturgy.

[31] The quoted text from the piece *Bonnon*, in the original, is as follows: "十方所有(勝妙華)". The clause-completing text in parentheses has been supplied by the translator after consulting the relevant piece in the 1472 Shōmyōshū as well as in the authoritative hymnal of the Nanzanshinryū branch of Shingon Shōmyō, the *Gyosan-taigai-shū*. Note that the characters "所" , meaning 'place', and "有" , meaning 'to possess', when used in compound, indicate possession, as well as often, location. For the purposes of explaining the distribution of the *hakase* graphs, a distinction between the two members of the compound has been made in the translation. Most importantly, the word "are" corresponds to the Chinese character "有" in the original text, of which the *hakase* graphs are being explained by Kakui in this passage.

When the upper and lower vocal registers are used, the *hakase* graphs should be indicated in the middle, that is, they should be written in the space usually allocated to the indication of the central vocal register. For example, the excerpt "pureland dwelling of the dharma king" from the piece *Monju-no-san* is an example of an upper vocal register *hakase* graph being indicated at a lower position than what would be theoretically warranted.[32] This is but one such example.

The excerpt *Namamaka* from the piece *Kongō-kai-Raibutsu* is an example of indicating a lower vocal register *hakase* graph at a lower [sic] position than standard.[33] Such examples are innumerable; as such, rather than attempting to memorize every particular instance, one must acquire a sense of the governing principle.[34]

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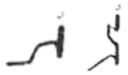
[32] According to the *Gyosantaigaishū*, the piece Monju-no-san modulates from the *ryo* to the *ritsu* scale beginning with the character '土'. In Shingon Shōmyō, a modulation from the *ryo* to *ritsu* scale is often synonymous with a modulation from a lower to higher vocal register. Here, though the piece moves to a higher vocal register, the *hakase* graphs, while maintaining the theoretically correct angles, are re-positioned to occupy the space theoretically reserved for indicating the central vocal register. Another point about this passage pertains to the translation of the title *Monju-no-san*. 'Monju' of "Monju-no-san" refers to the bodhisattva Mañjuśrī, and the character for the word "san" (讃) is used frequently in the Chinese Buddhist Canon to translate the Sanskrit word 'stotra'. For example, the *gaṇḍhī-stotra-ghātā*, a Sanskrit text attributed to the poet, dramatist, and orator Aśvaghoṣa (80–150) appears in Chinese translation in the 32nd volume of the Taishō Buddhist canon as "犍稚讃" (Ch. jiān-zhì-zàn, Jp. Kenchisan). For this reason, perhaps an acceptable Sanskrit translation of "Monju-no-san" would be '*Mañjuśrī-stotra*'. For now, however, this translator has been unable to source the text of this piece to even the Chinese Buddhist Canon, let alone to a source Sanskrit text, and one cannot preclude the possibility that this piece was composed, albeit in Classical Chinese, in Japan.

[33] This is likely a scribal error, as the excerpt *Namamaka* from the piece *Kongōkai-Raibutsu* is actually an example of indicating a lower vocal register *hakase* graph at a higher position than standard; this much can be determined from an analysis of the notations in the *Gyosantaigaishū* and the 1472 *Shōmyōshū*, in which the *hakase* graph for the first character of this excerpt, "南", though positioned, as it is, at a 180-degree angle as if it were indicating the pitch kaku from the central vocal register, appears at the lower left-hand corner of the character. Thus the affixer of *hakase* graphs seems to have been seeking to differentiate this pitch from 'kaku' of the central vocal register. Clearly, the pitch being indicated is that of 'chi' from the lower vocal register, but it is done so not below and wrapping counterclockwise around the character to the right, but rather, within the ambit of the space allocated theoretically to the indication of the central vocal register. Also regarding this passage, the word 'Namamaka' is a Sino-Japanese transliteration of the Sanskrit 'Namaḥ Mahā...', or 'salutations to the great...'); finally, "Kongōkai-Raibutsu" might be translated into English as 'Praise to the Buddha of the Diamond Realm'. For a facsimile of the *Gyosantaigaishū* see Chōe 1496 (1743), available online via the following link: https://www.dh-jac.net/db1/books/results-thum.php?f1=arcBK01–0091&f12=1&sortField1=f8&-max=40&enter=default&lang=en. For a facsimile of the 1472 *Shōmyōshū*, see Fukushima 2018: 7–50.

[34] With regards to that principle, when *hakase* graphs are indicated in positions differing from their theoretically correct ones, that is, with respect to their corresponding vocal registers, the theoretically correct angles of the *hakase* graphs are nonetheless maintained. So, for example, were the pitch shō from the upper register to be indicated, for practical and aesthetic reasons, in the central position, it would be done so at a 90 degree angle; it would, in notation manuals not utilizing the small dots that specify the starting points for the *hakase* graphs (more on this later), appear to be representing the pitch 'kaku' from the central vocal register.

6.3 How to link the hakase graphs

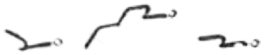
When moving, for example, from the pitch 'kyū' to the pitches 'shō' or 'kaku', the *hakase* graph of the second member in each case should emanate from the centre of the *hakase* graph of 'kyū'. The indication of the melodic type 'pierce and twist' is more refined in its details, and it should appear as follows: [35]



This *hakase* graph should be indicated with the second member of each pair emanating from the centre of the first member.

In moving from the pitch 'shō' to another pitch, the *hakase* graph should, for the most part, be indicated as follows:

Here, the initial member 'shō' is thicker than that of the succeeding members. All other such cases abide by this rule. When moving from the pitch 'kaku', the succeeding *hakase* graphs for the most part are thinner than the initial 'kaku', as follows:



Additionally, a *hakase* graph succeeding that of 'kaku' should emanate from the latter's final third portion and, as stated before, should be thinner.

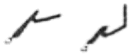
For the most part, when moving from the pitch 'chi', the *hakase* graphs should be indicated as follows:

Here, the second members, just as in the previous examples, are thinner.

In moving from the pitch 'u', the *hakase* graph should, for the most part, be indicated as follows:

All other such cases follow this pattern.

When moving from the pitch 'kyū' of the upper vocal register, the *hakase* graphs should take the following form:

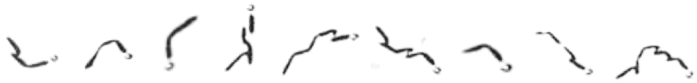


[35] The images contained in the body of the present translation are screenshots taken from a digital facsimile of the eighteenth-century manuscript, published in this translator's own master's thesis: Duran 2017. The images as they appear here are not necessarily at scale with regards to the original or with respect to each other.

When moving from the pitch 'u' of the lower vocal register, the *hakase* graphs should, for the most part, take the following form:

6.4 Regarding the Lengths of Hakase Graphs

These are but some examples of the various lengths of *hakase* graphs:



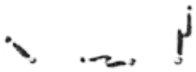
6.5 Regarding the thickness of hakase graphs

With regards to the matter of the thickness or thinness of *hakase* graphs, even in such instances when, for example, the pitch 'chi' is followed yet again by the same pitch 'chi', the second member is indicated thinly, as follows:

This rule is followed in all such similar instances employing the other four remaining pitch levels.

6.6 Regarding short hakase graphs

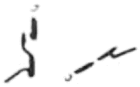
At times, a normal-sized *hakase* graph will be followed by a shorter one, for example:



Hakase graphs such as these are called 'continuing breath'.

6.7 Regarding long hakase graphs

There are times when a *hakase* graph will be indicated slightly longer than usual, for example:



6.8 How to bend the hakase graphs

There are times when a *hakase* graph should be indicated in a twisting manner, for example:

In these two examples, though they both indicate, by way of the initial *hakase* graph in each example, the pitch 'chi', one of the 'chi' *hakase* graphs stands quite erect, while the other faces in a more downward direction. Though the norm is that the pitch 'kyū' be indicated facing directly downward, the pitches 'chi' and 'kaku' diagonally, and the pitch kaku horizontally at a 180 degree angle, the most fundamental principle of *hakase* graphs is their form, and as such, these forms are not

necessarily standardized but rather should be adjusted for aesthetic and otherwise practical concerns.[36]

6.9 Regarding the positions of hakase graphs in the sutras

A point to be careful about with regards to the *hakase* graphs is as follows: in such cases as that of the Rishu-kyō and Amida-kyō, one must be cautious with the spatial relationships between the upper and lower members of vertically adjacent characters; the *hakase* graphs of those characters should all be of the same size, for example: [37]

Whether or not a column of characters is succeeded by yet another column or not, the length of the *hakase* graphs should not be extended; rather, the *hakase* graphs should be indicated directly below and in close proximity to their respective characters. An exception to this rule is the case in which the space between two adjacent characters is cramped; in such cases, and depending whether the column of characters in question is succeeded by yet another such column, one may use the additional space between the columns and indicate the *hakase* graphs in such a way that is larger than usual. One should know this principle well.

6.10 Regarding the positions of hakase graphs in the fukuyō

In the Fukuyō, one must be especially cautious with regards to indicating, with *hakase* graphs, pitches that follow the pitch 'kyū'.[38]

6.11 A list of hakase graphs[39]

This *hakase* graph is called 'continuing breath'.[40]

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[36] Here apparently, is the presence of a scribal error. The pitches typically indicated diagonally in the central vocal register are 'chi' and 'shō' , not 'chi' and 'kaku'.

[37] The *Amida-kyō* (*Fúshuō-āmítuó-jīng*) is the Chinese translation by the Kuchean monk and scholar Kumārajīva (344–413) of the Pureland-themed Buddhist text known in Sanskrit as the '*Sukhāvatī-vyūha sutra*'.

[38] *Fukuyō* (*Bùkōng-juànsuǒ-shénbiàn-zhēnyán-jīng*) is a short piece, the text of which is a mantra taken from the *Amoghapāśakalparāja sutra* by the Northern Indian Buddhist monk and translator Bodhiruci (ca. sixth century).

[39] In the notes for this section of Kakui's text, reference has been made to the neumes of the Latin and Byzantine Christian churches for the purposes of comparison with Kakui's neumes. For all references to the Latin neumes, the translator has consulted Floros 2011. For the Pale-Byzantine neumes, the author has consulted Wellesz 1978b: 14–52. Finally, for the Middle Byzantine neumes, the author has consulted Troelsgård 2011.

[40] The text here reads "ikitsuzuki" (息續). This neume resembles the Latin *punctum* and Paleo-Byzantine *kentema*, especially as when the latter appears in the Middle Byzantine system used in conjunction with *oligon*, in which case it represents an ascending third. In the Shingon tradition, this neume most often appears as a component of a compound of two or more neumes, and it represents simultaneously both a continuity of the breath and a cutting-off of the sound in the midst of a transition between two adjacent notes that share the same pitch and are intoned on the same syllable. Interestingly enough, the corresponding neume in the Middle Byzantine system is classified as a *pneumata*, which, in the case of the ancestral Alexandrian prosodic signs, refers to the group of diacritics that indicate the presence or absence of aspiration (Ltn. *spiritus*). In

Hakase graphs like this one are called 'pierce and twist'.[41]

This *hakase* graph is called 'pierce and overlap'.[42]

This *hakase* graph is the same as that above, namely, 'pierce and overlap'.

This *hakase* graph is called 'draw in'.[43]

This *hakase* graph is called 'rising sound'.[44]

This *hakase* graph is called 'receiving sound'.[45]

This *hakase* graph is called 'bend and suspend'.[46]

This *hakase* graph is called 'pierce and stop'.[47]

This *hakase* graph is called 'shake and descend'.[48]

This *hakase* graph is called 'shake and overlap'.[49]

This *hakase* graph is called 'shake and bend upward'.[50]

This *hakase* graph is called 'kaku, of which there is no bending upward'.[51]

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pieces with Chinese-character transliterated Sanskrit texts, the neume "ikitsuzuki" is often applied to text segments in which the underlying Sanskrit text features a double consonant. See Duran 2020:, 56.

41 The text here reads "tsuki-mawasu" (突回).

42 The text here reads "tsuki-kasane" (突重). This neume, as well as the one that follows it, resembles the Latin *porrectus* and Paleo-Byzantine *parakletike*. Like *porrectus*, 'tsuki-kasane' notates a three-pitch pattern. When 'tsuki-kasane' is drawn from left to right, as it is in Kakui's treatise, the three-pitch pattern is characterized by a fall and subsequent rise, just as the pitch pattern indicated by *porrectus*. In such cases that 'tsuki-kasane' is drawn from right to left, the direction of the pitch inflection is often reversed, becoming a rise and subsequent fall. In either case, the precise interval associated with the movement from the first to the second members of the three-pitch pattern represented by 'tsuki-kasane' varies between pieces, sub-sects, and performers. In some cases, the second member of the three-pitch pattern is distinguished not by a change in pitch per se, but rather, by way of decreased volume and a change in tone color.

43 The text here reads "hiki-komu" (引込).

44 The text here reads "agaruoto" (アガル音).

45 The text here reads "ukeoto" (受ケ音).

46 The text here reads "ori-kake" (折懸). This neume most resembles the Middle Byzantine *ison*, but whereas the latter notates a repeated pitch, 'ori-kake' seems to have more of an articulatory and, ultimately, durational function. In the Buzan sub-sect, 'ori-kake' has morphed into the graphically distinct 'nomu'(のむ). The latter is strictly applied to Chinese characters of which, in their Sino-Japanese readings, the final morpheme is represented by the kana 'tsu' (ツ). Such Chinese characters are, as a rule, in the entering tone (入声), a phonetic feature that is realized musically with an abrupt cutting-off of the sound towards the end of an intonation.

47 The text here reads "tsuki-todome" (ツキトドメ). This is a compound neume comprised of elements from 'ikitsuzuki', 'tsuki-kasane', and 'ori-kake'.

48 The text here reads "yuri-ori" (由下).

49 The text here reads "yuri-kasane" (由重).

50 The text here reads "yuri-sorasu" (ユリソラス).

51 The text here reads "kaku ni soru to iu koto nashi" (角ニソルト云事無シ). This neume resembles the Middle Byzantine *oligon* with which it seems to share an overlapping function. In the Middle Byzantine system, *oligon* is used to notate an ascending second with no accentuation. In similar fashion, the neume from Kakui's treatise notates a movement to the pitch 'kaku' but without the use of the semitonal upward inflection known as 'sori'.

This *hakase* graph is called 'push and bend upward'.[52]

In practice, there are more *hakase* graphs than could possibly be enumerated. Not knowing this list of *hakase* graphs, and having not received oral transmission, one must not guess at their meanings thus giving disorder to their transmission. Also, with regards to the *hakase* graphs that are not listed here, each and every single one should be learned through oral transmission.

6.12 A list of techniques and concepts not indicated by the hakase graphs

'Blowing voice'[53]
'Self-descending'[54]
'Flavouring'[55]

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[52] The text here reads "osu-soru" (推スソル). This neume resembles the Latin *virga* and Paleo-Byzantine *oxeia*. Once again, Kakui's use of the term 'soru' in qualifying pitch movements on the basis of their ornamental rather than their structural scalar content seems to overlap with the Middle Byzantine system's use of various neumes in specifying differing levels of accentuation amongst pitch movements that are otherwise of identical intervallic content. In this regard, we may note that the Middle-Byzantine version of *oxeia* notates an ascending second with moderate accentuation.

[53] Here, "blowing voice" translates the term "fuku-goe" (吹声). To this translator's knowledge, no melodic type by this name is used in the extant traditions of Shingon Shōmyō, but its name, in both its ideographic representation as well as in the mental image that it evokes, is reminiscent of a melodic type used in the Tendai sect called "nodo-koe" (喉声), or "throat voice". For example, in the Tendai Shōmyō piece *Kuyōmon* (供養文), this melodic type, which is really an articulatory technique, is used in the pronunciation of the compound, 'issei' (一切), more typically pronounced in *go-yomi* as 'issai' but here pronounced in *kan-yomi*. The compound translates to 'all'. Here, on the last morpheme 'I', a quick and strong aspiration is given following the pronunciation of the vowel, precisely equivalent to how a visarga would be pronounced following a vowel in Sanskrit. It is the translator's strong suspicion that the visarga sound was indeed mapped onto the phonology of Chinese Buddhist chant texts and included as an obligatory articulatory phonetic technique and feature of their recitation. We know, for example, from the writings of Siddham scholars (ancient and medieval Chinese and Japanese scholars of Sanskrit phonetics and orthography) that the compound 'issei' contains consonantal gemination which in Sino-Japanese is known as sokuon (促音). This phonetic event is determined by the rules of euphonic combination as applied to the junction of initial character finals and succeeding character initials, which themselves were in the writings of the Siddham scholars, classified into two groups of stops, one nasal and the other consonantal. These two groups of stops were known respectively as kūten (空点) and nehanten (涅槃点), both of which are translations of Sanskrit terms, 'anusvara' in the former case and 'visarga' in the latter. It is the nehanten that gives birth to the sokuon, and the term 'issei' is a classic example of this. The puff of air used in the pronunciation of a sokuon such as this is reminiscent of the Sanskrit visarga, and it is aptly described by both the terms 'throat voice' and 'blowing voice'. For more on these and other phonetic adaptations of Sanskrit sounds to Chinese characters, see SChaudhuri 1998.

[54] The text here reads "jige" (自下). In the Buzan branch of Shingon Shōmyō, this is a highly melismatic melodic type that includes both a large ascent and descent. For an extensive look at the use of this melodic type in Shingon Shōmyō, see Gamo 1973: 117–43. The contour of this melodic type, as well as its name, meaning as it does "descent from oneself", is strangely reminiscent of the 'independent svarita' in Sāmavedic chant, and the author wonders whether or not this melodic type is an example of the influence of Sāmavedic chanting practices on Buddhist chant.

[55] The text here reads "enbai" (塩梅), or literally, "salt and plum". This refers to the upward semitonal ornamentation that is affected on the pitches 'shō' and 'ū' that expand the Shōmyō melodies outside of their anhemitonic pentatonic framework. The term 'enbai' in the context of Japanese Buddhist music occurs as early as the ninth century in the Tendai priest Annen (841–915)'s *Shittanzō*. Perhaps this term was originally a translation of the Sanskrit 'rasa', meaning 'flavor', but conceptually it is much closer to the concept of

'Looking-out-upon tune'[56]
'Dissenting view'[57]
'Prelude'[58]
In order to learn these, one must enter the house of Shōmyō and receive oral transmission.

6.13 Regarding the thickness of hakase *graphs*

Hakase graphs that are too small or too thin are especially undesirable. The indication of the *hakase* graphs should be large and vivid, and the affixing to them of the katakana script clear and in black ink.

6.14 Regarding the method of affixing the katakana script

For a practitioner of Shōmyō, properly affixing the katakana script to texts is of the utmost importance. Regrettably, there are many practitioners who do not understand this. The most frequently made mistake in this regard is affixing the kana 'u' to a Chinese character where in fact the kana 'fu' is required.[59] There are many examples of such characters of which the pronunciations are easily confused, but for the most part the matter can be summarized with the following examples:

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sādharaṇa. Indeed the metaphor of salt is used in the description of sādharaṇa, particularly that of the raised seventh scale degree, or *kākali-nī*, in the *Nāṭyaśāstra*, the foundational text of ancient Indian music and dramaturgy. See Bharata-Muni 1951: 13.

[56] Reizui's version of the text here reads "臨節", pronounced "rinzetsu", but the version of the text in the *Zoku-Shingon-shū-zen-sho*, one that was based on a coalescing of several different and later dated manuscripts, has the identically pronounced "輪舌". See Kakui 1986. Although the two renderings of the text are phonetically equivalent, only the latter can be construed as having any bearing on the practice of Buddhist chant, meaning as it does 'rolling tongue', and thereby apparently describing an articulatory technique used for enunciating chant texts. Hence, the *Zoku-Shingon-shū-zen-sho* version of the text is most likely correct. Reizui's rendering of the term in question, though possessing clear phonetic value, lacks apparently correct semantic value.

[57] The text here reads "isetsu" (異説). This is most likely not a technique but rather refers to the existence of differing views with regards to various topics within the oral tradition. In the twelfth century, the Shingon Shōmyō tradition was divided into four branches, namely, the Honsōōin (本相応院), Shinsōōin (新相応院), the Daigo (醍醐), and the Daishinshōnin (大進上人). It is very common in the *kudensho* literature for the authors to compare the teachings of their branch, in this case, the Daishinshōnin (later Nanzanshin) with those of others, for example, in this text, that of the Sōōin (presumably referring to both the Honsōōin and Shinsōōin).

[58] The word "prelude" here translates the Japanese term "Jo-kyoku" (序曲). In Tendai Shōmyō, this term refers to an unmetered shōmyō piece or section thereof. The "Jo" of "Jo-kyoku" also appears in the tripartite rhythmic and stylistic division of pieces utilized in the Nō theatre, known as Jo-ha-kyū (Jp. 序破急). There, "Jo" is an unmetered and slow introductory section, "Ha" a more briskly-tempoed intermediate section, and "Kyū" a fast-tempoed 'rush' to the end of the piece. The 'Jo-ha-kyū' concept has its theoretical origins in Japanese court music, or Gagaku, but in that tradition, there are few pieces that adhere to the tripartite 'Jo-ha-kyū' structure; more often, that structure is merely implied by gradual acceleration and deacceleration, and pieces tend to be categorized each by only one of the three types.

[59] In the modern realization of classical Japanese orthography, the kana 'fu' (フ) is pronounced as such only when it is in the word initial position. Otherwise, it follows pronunciation rules identical to those for the kana 'u' (ウ). Japanese Siddham scholars recognized both 'u' and 'fu' as consonantal stops, categorizing them

法 (ha-fu)	答 (ta-fu)	納 (na-fu)	習 (shi-fu)
劫 (ko-fu)	合 (ka-fu)	甲 (ka-fu)	拾 (shi-fu)
業 (ke-fu)	入 (ni-fu)	及 (ki-fu)	
搆 (se-fu)	立 (ri-fu)	十 (shi-fu)	

All of these characters are pronounced in the entering tone.[60] As such characters are innumerous, it is better to internalize the general principle rather than attempt to memorize them all.[61]

6.15 Differentiating the nasal sounds 'n' and 'mu'

Regarding the kana 'mu', though I have not myself received oral transmission from a teacher, I will give my own observations here. In such cases that the sound 'mu' is required in the middle of a *hakase* graph, it is written 'mu', but when the sound 'mu' comes at the end of a *hakase* graph, it should be written as 'n'.[62]

6.16 Differentiating double and triple kana

The differentiation of triple kana from double kana is of the utmost importance. Affixing triple kana where double kana are required, and conversely affixing double kana where triple kana are required, is indicative of a lack of study. Refer to the following examples:

as *kūten* (空点) and *nehanten* (涅槃点), respectively. The sound 'u' was classified as a guttural (kōnai, 喉内) nasal stop and 'fu' as a labial (shinnai, 唇内) oral stop. See Chaudhuri 1998: 86.

60 Here, for the first time in this short treatise, the tones of the Chinese characters (Ch. *sìshēng*, Jp. *shisei*) employed in *Shōmyō* texts take center stage. In general, there were four such tones, and in many early *shōmyō* texts these were indicated by way of circular dots at any of the four corners of a character in question. The dots themselves were and are known as *shiseiten*, and their functions can be specified as follows; a *shiseiten* at the lower left-hand corner of a character indicates that that character is in the level tone. In like fashion and proceeding clockwise, a *shiseiten* in the upper left-hand corner corresponds to the rising tone, in the upper right-hand corner to the departing tone, and in the lower right-hand corner to the entering tone. Kakui's main concern at this point in the treatise is with pronunciation, but as we will see, the *shisei* were also one of the determinates of melodic movement and direction in Shōmyō pieces. Also of interest here, is the fact that the neumatic notations known as *fushihakase* that preceded the advent of the *go-in bakase* system were drawn in such a way that they emanated from the *shiseiten*. By the time of the invention of the *go-in bakase* system, these marks were still used in some contexts but had also given birth to a separate but parallel set of dots that functioned exclusively as indicators of the points from which *go-in bakase* graphs emanate. These can be seen in all of the *hakase* graphs that appear in Reizui's treatise, and by extension in the images provided in this translation.

61 Literally, "it is better to know the ten-thousand by the one".

62 In the modern pronunciation of classical Japanese orthography, a word final 'mu' (ム) is read as a nasal 'n' (ン). The latter sound in modern Japanese is represented with the kana 'n' (ン) , of which the origins are slighlty obscure, but not completely so. By all estimations this special kana evolved from the graphically similar *candrabindu* used in the Siddham script to represent a final nasal in Sanskrit. Japanese Siddham scholars categorized 'mu' as a labial nasal stop, or kūten (空点). It is not entirely clear when the kana 'n' (ン) first came into use. See Chaudhuri 1998: 100.

Triple Kana[63]	Double Kana
乗 [shi-yo-u][64]	朝 [te-u]
勝 [shi-yo-u]	消 [se-u]
承 [shi-yo-u]	照 [se-u]
	繞 [ne-u]

6.17 Mouth-meeting Kana

There is the matter of the 'mouth-meeting kana'. For example, when intoning a Chinese character for a long time, sometimes the pronunciation-indicating kana that would normally appear at the end of a Chinese character does not so appear, and it is instead exchanged for a kana such as 'u'.

6.18 Un-notated sounds

There are musical matters that, though not being indicated by the *hakase* graphs, should in-fact be present in the voice. In order to learn these, one must receive oral transmission. If the sound one makes is exactly that which is indicated by the *hakase* graphs, this is evidence that one has not received oral transmission. In contrast, if one has received oral transmission, one will intone those sounds that, though correct, are not indicated by the *hakase* graphs.

6.19 The method of composing a hyōbyaku[65]

Depending upon one's station and the time at hand, one may unexpectedly be required to compose a hyōbyaku. Knowing how to indicate the *hakase* graphs in such times is of the utmost importance.

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[63] In these examples, the matter at hand is the differentiation between two sets of characters that, though agreeing (in Kakui's time) with regards to their vocalic sounds, were in fact descended from two different pronunciation groups, a fact made most evident by their accompanying orthography as well as in the pronunciation preserved in the current traditions of Shingon shōmyō. Therefore, I have opted to diverge from the modified Hepburn romanization system employed heretofore, opting instead for the use of hyphens to separate the roman text into sections representative of what are, in the Japanese text, individual kana.

[64] Voicing is often not indicated in Reizui's version of Kakui's text, and the romanization here reflects this. Hence, the character "乗", which in modern Japanese pronunciation would be 'jō' (ジョウ), is given in Reizui's manuscript as "shō" (ショウ).

[65] A *hyōbyaku*, alternatively pronounced *hyōhyaku*, is a piece in a mostly recitative style, and it is one that explains the purpose of a rite to the central deity/bodhisattva/buddha to whom that particular rite is addressed. *Hyōbyaku* is a sub-genre of pieces that is ultimately descended from the narrative-style of Buddhist chant known as *shōdō* in Sino-Japanese and *chàngdǎo* in modern Chinese pronunciation. This pedigree is shared with the sub-genre *kyōke* which Kakui discusses later in his treatise. The origins of *chàngdǎo* and the legends associated with its earliest master performers in China is discussed at length in the thirteenth volume of the *Memoirs of Eminent Monks* (Ch. *Gāosēng Zhuàn*, Jp. *Kōsōden*) compiled by the Chinese Buddhist monk Huìjiǎo (497–554) in the sixth century. Here, we can see that the *chàngdǎo* originated as stylized sutra lectures performed at large-scale maigre feasts. Given their didactic function, they were, naturally, performed in the vernacular, a linguistic feature that persists in the Sino-Japanese offshoots of *chàngdǎo* to this day. For a modern Japanese translation of the relevant section, see Ekō 2010.

The Shin and Sōō-in branches differ in their methods of creating a hyōbyaku.[66] The indication of *hakase* graphs is mostly standardized in both branches, but the basic pattern is deviated from on the basis of sandhi that occurs between adjacent characters upon euphonic combination. One must take this matter to heart.

One must not arbitrarily indicate the *hakase* graphs without knowing the tones of the kana in question.[67] For example, there are regulations regarding the kana that function in the capacity of grammatical particles, namely, 'te', 'ni,' 'wo', and 'ha'. The tone of the kana 'no' is indeterminate. If the Chinese character from which a particular kana is derived is in the level tone, then accordingly, the diacritical marking of the tone of that kana is low. If the Chinese character from which a kana is derived is in any of the other tones, then accordingly, the diacritical marking of the tone of that kana will be high.[68] When composing a hyōbyaku, one must distinguish between the provincial sounds and the correct sounds.[69] It is a terrible thing for one to indicate the *hakase* graphs without knowledge of the difference between the *go-on* and *kan-on*. [70]

It is an enormous error, for example, to compose a piece based on the provincial sounds just because one prefers them. If one confuses the distinction between *go-on* and *kan-on*, then the melody will be low when it should be high, or conversely, it will be high when it should be low. In short, failing to distinguish between the provincial and correct sounds, and rather, arbitrarily indicating *hakase* graphs according to one's will, is not proper.

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[66] Here, as elsewhere, "Shin" refers to the Nanzanshinryū branch of Shingon Shōmyō. This was Kakui's branch, and it is the only branch of Shingon shōmyō to have been transmitted to the present time.

[67] Here, "the tones" refers to the *shisei*, which according to a note by Reizui not included in the present translation, were applied to the kana on the basis of the tones of their progenitive Chinese characters. For example, the kana 'ア' (representing the syllable 'a') was derived from the Chinese character "阿", a character presumably pronounced in the level tone. As such, the kana 'ア' received a shiseiten in its lower left-hand corner, just as would a Chinese character in the level tone. A kana originating from any of the other three tones was given a *shiseiten* in the upper left corner. That is, the tones of the kana were classified into only two categories, not four. This two-part classification of tones is apparently based on the bifurcation of Chinese character tones into level (平, Ch. píng, Jp. hyō) and oblique (仄, Ch. zè, Jp. soku) categories, with the oblique category encompassing all of the tones other than the level one, be they rising (上, Ch. shǎng, Jp. jō), departing (去, Ch. qù Jp. kyo), or entering (入, Ch. rù, Jp. nyū).

[68] In Mair and Mei (1991: 382–83), it is argued quite convincingly that the bifurcation of the Chinese tones was based on the concept of syllable weight transferred from Sanskrit prosody to Chinese Buddhist hymnody. For a look at how this manifests in *Shōmyō* pieces with Chinese-character-transliterated Sanskrit texts, a class of pieces known in Japan as *Bonsan*, please refer to the translator's Japanese-language PhD dissertation: Duran 2020. Here, it is demonstrated that a stress accent based on syllable weight, perhaps that of the Classical Sanskrit register, is a key determinate of melodic generation in a large number of those pieces.

[69] Here, "provincial sounds" most assuredly refers to the so-called *go-on*, one of the two systems of Chinese character pronunciation prevalent in Japan from Heian times and the one originating in the area south of the Cháng Jiāng (Yangtze) river. This layer of readings was in all likelihood imported to Japan via the Korean peninsula between the fifth and sixth centuries. On the other hand, "correct sounds" here refers to the second of the two systems, namely, the *kan-on*, which corresponds roughly to the pronunciation of Chinese characters in the Chinese capital Cháng'ān during the Tang Dynasty (618–907).

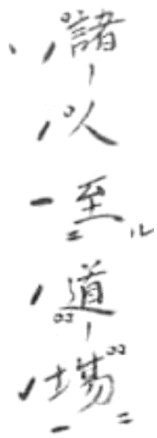
[70] Here, Kakui refers to the two sets of Chinese character pronunciation directly.

6.20 The 'Kō-Otsu-Hei-Tei' portion of a hyōbyaku

Hyōbyaku contain sections that are divided into four clauses indicated by the terms Kō, Otsu, Hei, and Tei, of which the melodic patterns are somewhat regulated; in such sections, there are times when one's indication of the *hakase* graphs is not entirely dependent upon one's knowledge of the 'correct sounds' of the characters. Depending upon the situation, one may indicate the *hakase* graphs in such a manner not in accordance with the sounds of the Chinese characters. Be this as it may, not knowing the distinction between the *kan-on* and *go-on* creates irregularities in the melodies that are not in accordance with the dharma; it is an embarrassment and renders one the object of ridicule.[71]

6.21 The method of positioning hakase graphs when moving from the level tone to the departing tone

There are times at which, when moving from the level tone to the departing tone, though it is indicated that the level-toned character be intoned at a high pitch and the departing-toned character at a low pitch, with regards to the actual sound there is no rise in the level-toned character's pitch. An example from the 'tei' clause is as follows:[72]



6.22 Differences between the shin and sōōin branches with respect to notating the kō clause

At the end of the line in the kō clause from the previously mentioned four-clause section of a hyōbyaku, the Shin branch indicates the *hakase* as 'chi' followed by 'kaku', as such:

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[71] Given the explicitly Buddhist context of this treatise, I have translated the character "法" with the Sanskrit term *dharma*, its most common correlate in Buddhist contexts, but it may as well have been translated here as 'rules'.

[72] In Kakui's example, the text reads "諸人至道場" (everyone proceeds to the *dōjō*). Note here that in the image, both characters "道" and "場" contain a doubling of the *shiseiten*. This indicates voicing of the initial consonant, much like (and progenitive of) the diacritical marks known as *dakuten* in modern Japanese, which likewise serve the function of indicating voicing. Once again, by way of comparison with the Nestorian neumes mentioned earlier, one notes that a doubling of the dots in that system affects an intensification of the melodic movement dictated by the positions of those dots.

Conversely, the Sōō-in branch, in this same section, exclusively uses the *hakase* 'chi'. Nevertheless, in both branches, when a character in the level tone succeeds one in an oblique tone the level-toned character receives the *hakase* 'chi', as follows:[73]

No matter how many successive level-toned characters occur, there is no mistake in indicating them all with the *hakase* 'chi'. All of the oblique-toned characters will receive either the *hakase* 'strike and suspend', as follows:

or the *hakase* 'overlap', as follows:

Which of these two *hakase* graphs is used is determined by the sandhi of the characters in question.[74]

6.23 Differences between the shin and sōō-in branches with respect to the notation of the otsu clause

In the Shin branch, the otsu clause *hakase* are indicated at the pitch levels 'chi', 'kaku', 'shō', and 'kaku'. In the Sōō-in branch, the beginning of the clause is notated 'chi'. This is followed in the next character by the *hakase* 'chi' and 'kaku'. Finally, the *hakase* of the last character of the clause are indicated at the pitch levels 'chi', 'kaku', and 'shō'.

6.24 Differences between the shin and sōō-in branches with respect to the notation of the hei clause

In the Shin branch, the hei clause is notated with the *hakase* 'chi', 'kaku', and 'shō', after which there is a pause. With regards to this clause, the Sōō-in branch's melodic treatment matches that of the Shin branch's kō clause.

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[73] Here, "oblique tones" (仄声) refers to any of the three tones other than the level one, whether they be rising, departing, or entering.

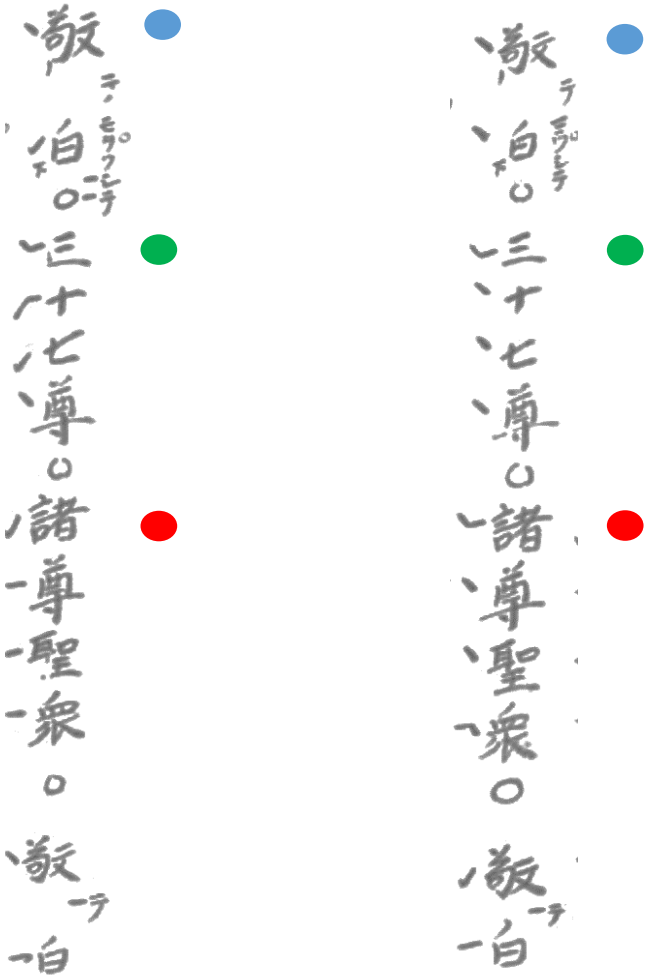
[74] The priority placed upon distinguishing between level and oblique tones for the purposes of determining melodic movements in this explicitly Buddhist chant context would seem to be yet more proof of the theory originally put forward by Victor H. Mair and Tsu-Lin Mei, that the concept of syllable weight was transferred from Sanskrit prosody to Chinese Buddhist hymnody before exerting influence on the genre of poetry known as 'Recent Style Poetry'. Once again, for a look at how this manifests in *Shōmyō* pieces with Chinese-character-transliterated Sanskrit texts, a class of pieces known in Japan as *Bonsan*, please refer to the translator's Japanese-language PhD dissertation (cited in footnote 38), where it is demonstrated that a stress accent based on syllable weight, perhaps that of the Classical Sanskrit register, is a key determinate of melodic generation in a large number of those pieces.

6.25 Differences between the shin and sōō-in branches with respect to the notation of the tei clause

In the Shin branch, the tei clause is notated as 'shō', 'kaku', 'shō', 'kaku', followed by a pause. In the Sōō-in branch, this is notated as 'shō', 'shō', 'shō', 'kaku', followed by a pause.

6.26 Differences between the shin and sōō-in branches with respect to the notation of the kami-oroshi clause

In the notation of the Kami-oroshi clause, there is a difference between the Shin and Sōō-in branches. Even though the texts of the two examples that follow are the same, there are differences in the *hakase* graphs:



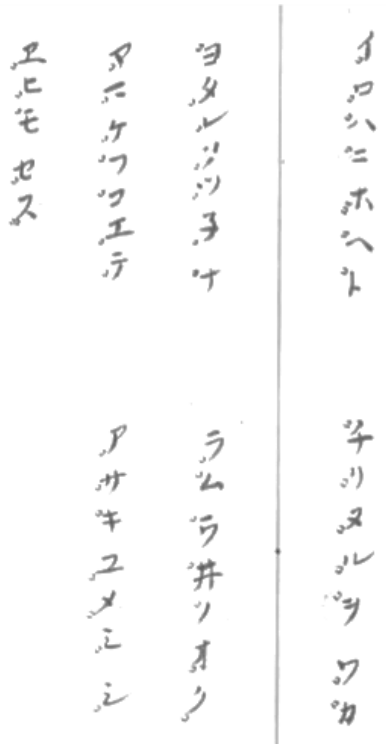
Kami-oroshi Clause, Shin-Branch Kami-oroshi Clause, Sōō-in Branch

One must learn to distinguish between these two versions of the same text by studying the *hakase* graphs.[75]

[75] Kakui here gives not two versions of a single line from the kamioroshi-clause, but rather, multiple segments of that clause. In Kakui's examples, the individual segments of text are separated from each other by circles. See Appendix V for a transcription of the current Buzan tradition's realization of several of these segments, as they appear dictated in Kuriyama and Koizumi 1998. The blue, green, and red dots accompanying the images here are intended to be used in matching the relevant text sections to the transcription in Appendix

Also, with regards to the five-layered melody of the piece Kyōke, there are notational differences between the Shin and Sōō-in branches.

Everything written heretofore is that which was imparted by the master. Memorize this treatise as quickly as possible, and upon doing so, throw it into the fire. What has been written here has so been written that it will not be forgotten, and it represents only the most basic of principles.



The tones of the katakana script[76]

END OF KAKUI'S TEXT

V. Note that in the current Shingon traditions this piece is composed in *ōshikichō*, a mode that is classified as neither *ritsu*, nor *ryo*, but rather, as *chūkyoku*. Chūkyoku is considered to be an amalgamation of the *ritsu* and *ryo* modal types, but in its anhemitonic pentatonic form, its interval structure is equivalent to that of a *ritsu* mode. The anhemitonic pentatonic version of *ōshikichō* is A-B-D-E-F#.

76 This final image, containing no explanation, is an arrangement of the pangrammatic song known as the *Iroha-uta*, and it is apparently included here to teach the various tones of the katakana characters, which as stated before, were based on the tones of their progenitive Chinese characters. One presumes that this song was at some point chanted in a melody, the contours of which were determined by the tones of the constituent kana characters. One further surmises that this acted as a device for ingraining the sounds of the different kana tones in the minds of the officiant priests hence facilitating their powers of rapid recall, powers to be called upon in such events requiring the construction of a *hyōbyaku* or any other such *shōmyō* piece in the kanbun-kundoku style that would necessarily involve the use of kana, as opposed to only Chinese characters.

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The translator would like to acknowledge Dr. Kazuhiro Sugimoto of the Tokyo University of the Arts, without whose help the translator's modern Japanese translation of Kakui's treatise that laid the groundwork for the present English translation, would have never come to fruition. The translator would also like to acknowledge Dr. Yasuko Tsukahara for her ever-abiding patience and guidance, most graciously bestowed upon the present translator during his post-graduate studies in Japan. One must also relay a very special thanks to Professor Steven G. Nelson of Hōsei University, who inducted the translator into the world of Tang Dynasty musical theory and tablatures which, although not the subject of the present work, informs it immensely. Finally, this paper is dedicated to Dr. Margaret Rorke, Professor Emeritus of the University of Utah School of Music who, in addition to having examined the contents of the paper at various stages and provided indispensable advice, also taught the translator, in the first place, to love things ancient.

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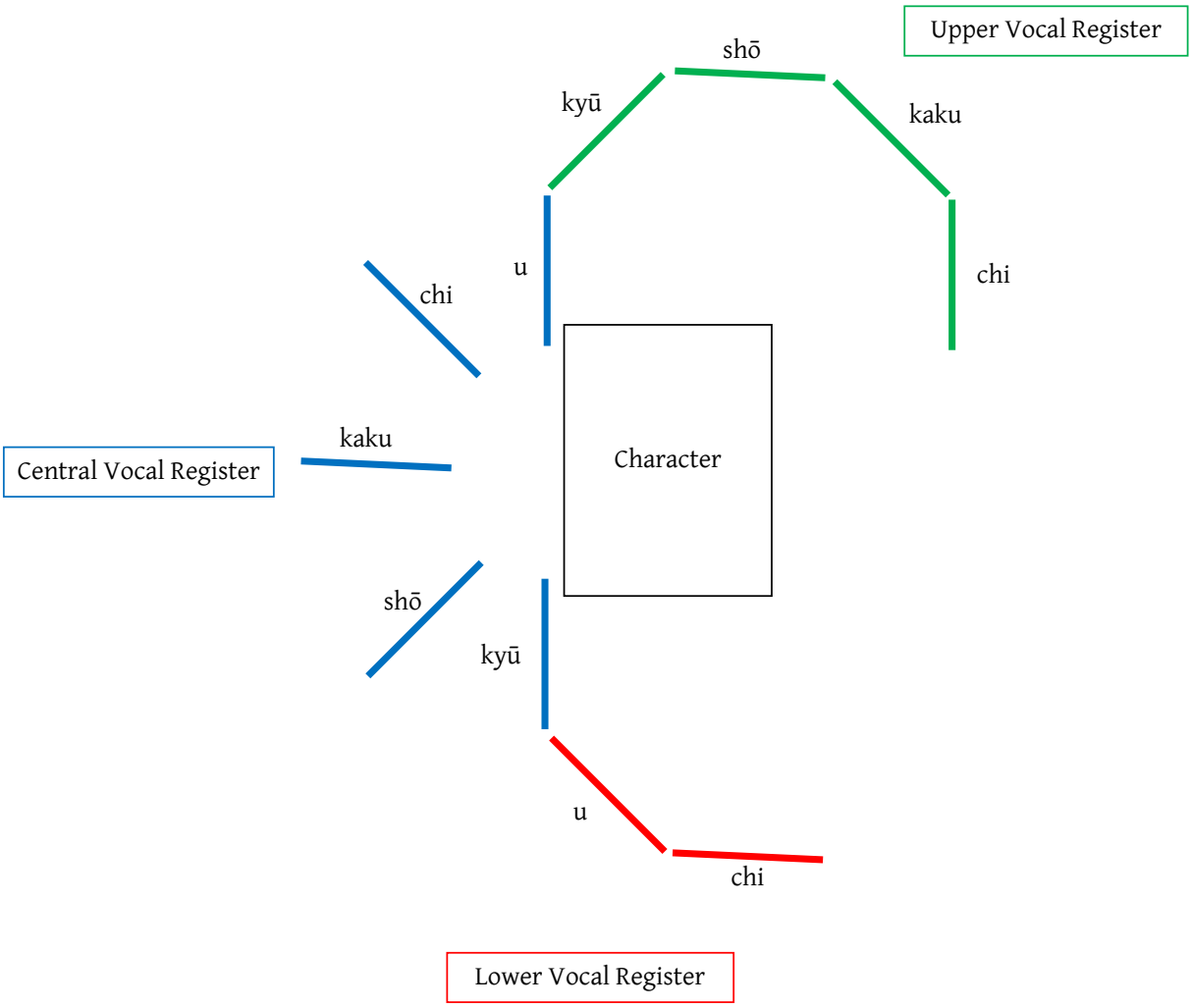
Appendix I: A comparison of the Carolingian gestural neumes (circa 800), the Dunhuang neumes from the *Avalokiteśvara Sutra* (948) and the Japanese *fushihakase* (1034–1202)[77]

	Name	punctum	virga	podatus	clivis	torculus
Carolingian Neumes	Square-note shape					
	Gestural Neume					
Dunhuang Neumes		NA				
Japanese *Fushihakase* (including *shiseiten*)	● or					

[77] The Carolingian neumes presented here are of the archetypical 'Type-2 Gestural' variety as deduced in Levy 1987: 75. The images of the Dunhuang neumes provided here are taken from Kobayashi 2014: 176, and that of the *fushihakase* are as they appear in Numoto 1991: 72.

Appendix II: How to read the *Go-in Bakase* graphs[78]



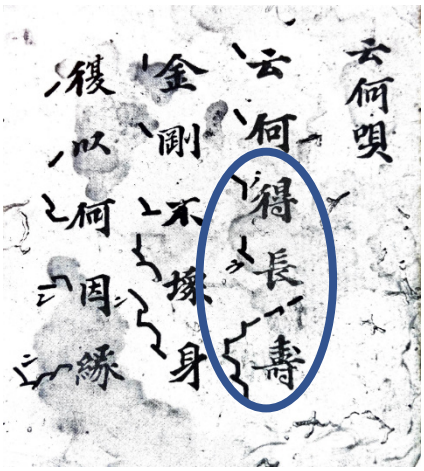
Ryo Pentatonic Scale: kyū [2] shō [2] kaku [3] chi [2] u
Ritsu Pentatonic Scale: kyū [2] shō [3] kaku [2] chi [2] u

[78] The intervallic sequences of the *ryo* and *ritsu* pentatonic scales are here expressed by way of pitch names followed by bracketed Arabic numerals indicating the number of intervening half-steps between any pair of successive scale degrees. Note that the distance from a lower 'u' to an upper 'kyū' in both the *ritsu* and *ryo* pentatonic scales is three half-steps.

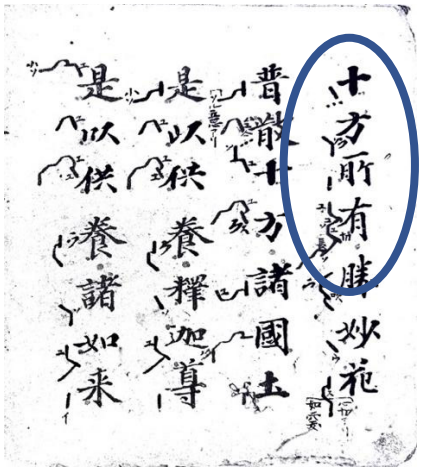
Appendix III: The notational treatment of the character 'ground' ("地") from the *Rishukyō* (理趣経)[79]

[79] This example is taken from the 1472 Shōmyō-shū, printed at Kōyasan and published in facsimile format by Nelson and Fukushima. See Fukushima 2018: 35. The relevant section of text, as referred to by Kakui, is indicated with a blue oval. It is the only such instance of the character in the texts of the *Rishukyō* that this translator could identify. Here, as described previously, the second *hakase* graph affixed to the character "地" though indicating the pitch 'u' does not appear at a 90-degree angle as it theoretically should, but rather, it is tilted slightly to the left. Note that the image has been slightly modified such that succeeding text sections separated from each other in the publication of the anthology appear together without a break. In the current traditions, this piece is in the *chūkyoku* mode *ōshikichō*.

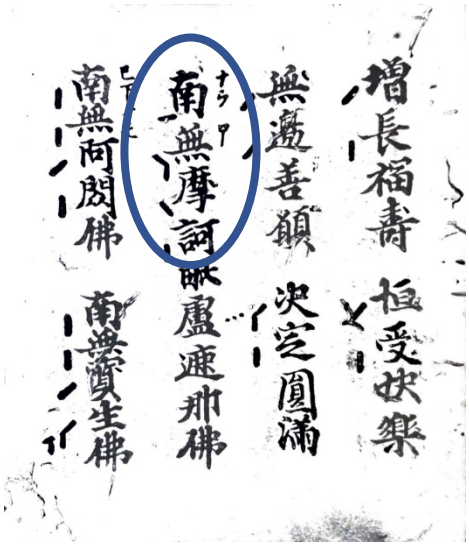
Appendix IV: Examples of re-positioned *hakase*[80]



Excerpt from Unga-bai (長寿)[81]



Excerpt from Bonnon (十方所有)[82]



Excerpt from Monju-no-san (土法王家)[83]

Excerpt from Kongōkai-Raibutsu (南無摩訶)[84]

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[80] All of these examples are taken from the 1472 Shōmyō-shū, printed at Kōyasan and published in facsimile format by Nelson and Fukushima. See Fukushima 2018. In Appendix IV, the relevant text sections, as referred to by Kakui, are indicated with blue ovals.

[81] Fukushima 2018: 9. In the current Shingon traditions, this piece is in the *ryo* mode *sōjō*.

[82] Fukushima 2018: 11–12. In the current Shingon traditions, this piece is in the *ritsu* mode *banshikichō* .

[83] Fukushima 2018: 40. This piece is in the *ritsu* mode *hyōjō*.

[84] Fukushima 2018: 26. This piece is in the *chūkyoku* mode *ōshikichō*.

Appendix V: Transcription of a segment from the Hyōbyaku Kami-oroshi Clause[85]

所要時間 10′42″～11′05″

表 白
HYŌHYAKU

実際の音高の範囲

[Solo]

磬 Kei

う ー ー や ま ー っ て ー
U- ya-ma- t- te,

し ん ご ー ん け ー う 主 ウ ー だ ー い に ち
Shi- n- go- n- ke- u- shu, Da- i- ni- chi-

如 ー ら ー い こ ん ご ー か ー い 会 さ ん じ
nyo- ra- i, Ko- n- gō- ka- i- e, sa- n- ji-

う し ー ー そ ー ん 九 ー 会 ま ー ー ん ー 茶
u- shi- so- n, ku- e- ma- n- da-

羅 ー ー ー ー ー ー ー ー ア ー ー 諸 ー そ ん 聖 衆
ra a sho- so-n- shō- jū

● "敬テ"; ● "三十七尊"; ● "諸尊聖衆".

[85] This transcription can be found in Kuriyama and Koizumi 1998: 140.

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