

# The adventures of Pāṇini's grammar in China and Japan: the case of the *kāra*/*vibhakti* system

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**Abstract** – In this article we deal with the translation and interpretation of the Indian indigenous theory of grammatical case in China and Japan. After a brief survey of the *kāra*/*vibhakti* system as it appears in Pāṇini's *Aṣṭādhyāyī*, the earliest Chinese accounts on this topic are presented. We argue that this refined theoretical achievement of Pāṇini's was not entirely understood in East Asia. We mainly focus on the accounts of the Indian case theory by two Chinese monks, Xuánzàng and Kuījī. We hypothesize that the eight cases identified by Kuījī go back to some late post-Pāṇinian grammatical tradition. Concerning the Japanese treatment of *kāra*s, we focus on the fact that a modified version of this same theory was applied to the Japanese verbal inflection, thus showing a total reinvention of this Sanskrit grammatical category via Chinese mediation and some original innovations performed by the Japanese Buddhist scholars.

**Keywords** – Pāṇini, *kāra*, *vibhakti*, grammatical case, Middle Chinese, Xuánzàng, Kuījī, Tsurumine, *hattenjō*.

## 1 Introduction to Pāṇini's *kāra*/*vibhakti* device

### 1.1 Pāṇini's theory

The Sanskrit grammatical tradition bore a crucial influence on East Asian linguistic thought due to the general prestige that Indian culture, and the Buddhist one in particular, exerted on its neighboring cultures. While the importance of Indian studies on writing and phonetics for China and Japan is often recognized by contemporary scholarship, the influence of the Sanskrit indigenous grammatical theories and terminology is a less known page in the history of the Indian Buddhist influence on East Asia. The grammatical category tackled in the present article is that of the nominal case (and other related topics).

In order to understand how Chinese and Japanese scholars reinterpreted such a category, we need to briefly outline the accounts made by the Indian grammarians on the nominal cases in Sanskrit. In his *Aṣṭādhyāyī* (5<sup>th</sup> cent. BC ca.), Pāṇini distinguishes two fundamental notions related to the nominal declension: the *kāra*s and the *vibhaktis*.<sup>1</sup> By this theoretical dichotomy, Pāṇini separates the content expressed by the wordforms and the sets of morphological forms. Roughly speaking, *kāra*s may be viewed as equivalent to the notion of semantic (thematic) roles in contemporary linguistics. They are expressed by the *vibhaktis*, i.e., sets of equivalent case endings (a total of seven). The

\*This paper is the result of a strict collaboration of the two authors, who jointly discussed every detail. However, a major responsibility must be credited to A. Keidan for §§1, 2.2, and 2.3; to C. D'Antonio goes the responsibility for §§2.1, 2.4, 2.5, and 3. The concluding remarks are due to both authors.

<sup>1</sup>For a general introduction to Pāṇini's grammar see Cardona (1988).



*kāra*kas are six: *apādāna* ‘source’, *sampradāna* ‘receiver’, *kaṛaṇa* ‘instrument’, *adhikaraṇa* ‘location’, *karman* ‘patient’, *karṭṛ* ‘agent’.

The definitions of the *kāra*kas are essentially semantic, with some syntactic hints in the two most important ones (*karman* ‘patient’ and *karṭṛ* ‘agent’).<sup>2</sup> For example, the *apādāna* ‘source’ is defined as “the fixed one, in case of a movement away”, the *adhikaraṇa* ‘location’ is defined as “the place”, and so forth.

Instead, *vibhaktis*, being pure forms, have no a priori content, so no definitions could apply here. The labels used for referring to the *vibhaktis* are purely numerical, from *prathamā* ‘first’, ‘the nominative’ to *saptamī* ‘seventh’, ‘the locative’.<sup>3</sup>

According to (the most widespread interpretation of) Pāṇini, *kāra*kas have to be *abhihita* ‘expressed’ by some morphological means, for instance: *vibhaktis*, verbal endings, nominal derivational affixes, nominal composition. Only one “expression” per clause is allowed. The expression of *kāra*kas through the *vibhaktis* is the “last resort” option, which is activated under the condition that the other possible means of expression have been ruled out (as suggested by the *sūtra* 2.3.1 *anabhihite* ‘if not expressed otherwise’).

The assignment of a *vibhakti* to a *kāra*ka is in no way a one-to-one correspondence, as each specific *kāra*ka may be expressed by different *vibhaktis*, whereas each *vibhakti* may be used for expressing different *kāra*kas (and also some other semantic content). Each *kāra*ka, however, has what can be called a “canonical expression” by a *vibhakti*, while other *vibhaktis* represent a sort of “alternative option”. Thus, the “canonical expression” for the *karman* ‘patient’ is the second *vibhakti* (the accusative in Western terminology). But, alternatively, it can be expressed by the sixth *vibhakti* (the genitive). In turn, the genitive also expresses the *karṭṛ* ‘agent’, whose canonical expression is the third case (the instrumental).

The example in (1) shows a noun (*Devadattaḥ*, a person name), functioning as *karṭṛ* ‘agent’, which is here expressed by the verbal ending *-ti*,<sup>4</sup> so that the third case (instrumental), canonically assigned to this semantic role, is no longer needed. The *karman* ‘patient’ (*odanaṃ* ‘rice’) is not expressed by any verbal device, thus needing the nominal case ending (accusative).

- (1) *Devadattaḥ kāṣṭhaiḥ sthālyām odanaṃ pacati*  
 Devadatta-NOM.SG firewood-INS.PL pot-LOC.SG rice-ACC.SG cook-3SG  
 ‘Devadatta is cooking ricegruel in a pot with firewood’

In (2), on the other hand, the verbal affix *-te* conveys the role of the patient (*odanaḥ* ‘rice’) and this time the agent needs to be expressed by the instrumental case ending (*Devadattena*).<sup>5</sup>

- (2) *Devadattena kāṣṭhaiḥ sthālyām odanaḥ pacayate*  
 Devadatta-INS.SG firewood-INS.PL pot-LOC.SG rice-NOM.SG cook-PASS.3SG  
 ‘Ricegruel is being cooked by Devadatta in a pot with firewood’.

<sup>2</sup>An attempt to present the *kāra*kas as a kind of intermediate “syntactic-semantic” category is defended in Cardona (1974), who tries to reconcile the complicated indigenous elaboration of Pāṇini’s thought with some modern ideas. See Keidan (2017) on how the definition of *karṭṛ* ‘agent’ overlaps with some of the definitional features of subject in modern linguistics.

<sup>3</sup>The vocative, quite correctly, is not considered a case by Pāṇini.

<sup>4</sup>Expressing semantic rules through the verbal endings is a peculiar feature of Pāṇini’s grammar. It allows him to account for forms of ellipsis where the subject is not expressed, such as *Pacati* ‘He cooks’ understood as a complete sentence.

<sup>5</sup>The fact that the verbal affixes may express semantic information, such as agent and patient, implies that the first *vibhakti* (the nominative) does not convey the semantic value of the *karṭṛ*, which is expressed by the verbal endings in an active sentence and by the instrumental in a passive sentence.

Summing up, the objects that are relevant for the following discussion are: (i) *kāra* labels; (ii) *kāra* semantic definitions; (iii) *kāra* canonical expressions through the *vibhakti*; (iv) *vibhakti* numerical labels.<sup>6</sup>

## 1.2 *Kāra*s after Pāṇini

Two remarks must be made with reference to Pāṇini's theory of nominal declension. First regards the astonishing modernity of his approach. His idea of explicitly detaching the morphological forms from their semantic/grammatical content — making the category of nominal case an abstraction consisting in a set of form-to-function correspondences — has not been paralleled by the western linguistics until the late 20<sup>th</sup> century. The traditionalist western approach to cases shows no similar level of abstraction: the case names (such as *nominative*, *genitive*, *dative* etc.) are based on semantics, as they attempt to imply the core semantic function of each case from its label. This amounts to saying that the content and the expression planes are not distinguished anymore: the receiver of an action is encoded with the dative “because” this is exactly the “dative” case, i.e. the “case of giving”.<sup>7</sup> In Pāṇini, on the one hand, the numerical labels of the *vibhaktis* do not imply anything about the functions expressed by such *vibhaktis*; on the other hand, the semantic definitions of the *kāra*s make no reference to the specific case-forms expressing them.

The second remark highlights the fact that in post-Pāṇinian grammatical literature Pāṇini's principle of detaching functions from forms has not been applied consistently. Already in some, supposedly spurious,<sup>8</sup> sections of the *Aṣṭādhyāyī* itself it seems that the *kāra* categories collapse with the *vibhaktis*: the *vibhaktis* are used as proxies of the *kāra*s that they canonically express. In other words: numerical *vibhakti* labels are used as if they indicated both the forms and the functions, not unlike the western case-labels. Thus, the term *dvitīya* ‘second case’ (accusative) is used here to refer to the *karman* ‘patient’, or, better, to an indeterminate category, which belongs neither to the form, nor to the function, but is rather a merger of the two; the term *karman* is no longer mentioned. It could be hypothesized that this simplification reflects the teaching practice of Pāṇini's grammar in the traditional schools of grammar.

The case theory underwent further rebranding, simplification, and theoretical conflation in the later grammatical systems, from *Kātantra* (1<sup>st</sup> cent. AD ca.) to *Cāndrayākaṛaṇa*, the “Buddhist” grammar of Cāndragomin (5<sup>th</sup> cent. AD ca.), as well as in various Pāli and Prakrit grammars of the Middle Ages. In terms defined in the conclusion of the §1.1, the following types of terminological conflation are observed: merger of (i) with (ii), i.e., the etymological usage of *kāra* terms; the substitution of (iv) to (i), i.e., *vibhaktis* used as proxies for *kāra*s; the substitution of (i) to (iv), i.e., *kāra*s used as names of the case endings.

Importantly for us, the theory that reached the Eastern part of Asia was clearly not Pāṇini's “genuine” theory, but rather some form of its later “simplified” reduction with the possible influence of the Buddhist schools of grammar.

<sup>6</sup>For the sake of simplicity, we are ignoring two more sets: the additional definitions of some *kāra*s, restricted to specific verbs, as well as the alternative *vibhakti*-to-*kāra* assignments. For more details of this categorization see Keidan (2015); cf. Singh (1974).

<sup>7</sup>How wrong this inference could be is explained in De Mauro (1965).

<sup>8</sup>See Joshi & Roodbergen (1983) and Keidan (2015).

## 2 Sanskrit case theory in China

### 2.1 The importance of Sanskrit Grammar in China

It is well-known that the study of Sanskrit morphology was not having a high consideration when Buddhism first arrived in China, whereas the study of script and phonetics was regarded as more useful for the orthoepy of *mantras* and *dhāraṇīs*, and thus had a significant impact on both Chinese and Japanese indigenous grammatical traditions.<sup>9</sup> In fact, both in China and Japan the Sanskrit language was known by the name *siddham* (*xītán* in Chinese, *shittan* in Japanese, both written 悉曇). This term identifies a specific script that evolved from the *brāhmī* around the 6<sup>th</sup> century AD in Northern India, and spread around until the 10<sup>th</sup> century. Although the term *siddham* identifies just the script through which the *sūtras* were brought to East Asia, in China and Japan it started to be used with reference to both the script and the language (which, for instance, was the Buddhist Hybrid Sanskrit<sup>10</sup>), as the Chinese and Japanese Buddhist monks did not distinguish these two notions very well.

During this period, the Buddhist texts were massively translated from (Buddhist) Sanskrit, or some Prakrit varieties, into Chinese. The translations were, at first, made by Indian and Central Asian, rather than Chinese, monks.<sup>11</sup> It was only after centuries that Chinese monks started traveling to India and studying Sanskrit directly. Later, the Chinese language itself served as a means of diffusion of Buddhism throughout the entire Eastern Asia.<sup>12</sup>

### 2.2 The first account by Xuánzàng

Only a few of the Chinese monks who traveled to India noticed and highlighted the importance of Sanskrit morphology. As far as we know, the earliest account of Sanskrit morphology made by a Chinese monk is due to Xuánzàng (玄奘 602–664), and can be found in his biography that describes his pilgrimage towards India between 629 and 645.<sup>13</sup>

As regards the nominal inflection, which he calls *zhuǎn* 轉, lit. ‘revolve, turn, alter, change’, he gives a brief explanation of the categories of gender (*nánshēng* 男聲 ‘masculine’, *nǚshēng* 女聲 ‘feminine’, *fēinán fēinǚ shēng* 非男非女聲 ‘neuter’, lit. ‘neither masculine, nor feminine’), number (*shuōyī* 說一 ‘singular’, *shuōèr* 說二 ‘dual’, *shuōduō* 說多 ‘plural’), and case. He lists eight case-forms (*bāzhuǎn* 八轉, lit. ‘eight changes’) in the traditional order of the *vibhaktis* (counting the vocative as the eighth case), but gives them semantic, rather than numerical, labels (or glosses). Below, we will discuss Xuánzàng’s account presenting the data in the following arrangement:

1. the number of the *vibhakti*;
2. modern case-name;

<sup>9</sup>On the influence of Sanskrit studies in China and Japan see Van Gulik (1956) and Chaudhuri (1998).

<sup>10</sup>In fact, the *sūtras* were initially written in Prakrit and only in a later stage they were re-written in Sanskrit, which however showed a high level of Prakrit influence; cf. Edgerton (1953) and Salomon (1998) for an account of the Buddhist Hybrid Sanskrit and the progressive Sanskritization of the Middle Indo-Aryan dialects.

<sup>11</sup>In particular, the translators could be of Parthian, Sogdian, Yuezhi, and other ethnicities, see Boucher (2017: 498). For instance, Kumārajīva (341–433), who came from Kucha (therefore, we could hypothesize a Tocharian ethnicity for him), or Paramārtha (499–569), coming from Ujjain. On the translation process in the Buddhist monasteries see also Zürcher (1959: 31)

<sup>12</sup>See Lurie (2011: 348 ff.) and Denecke (2017: 510 ff.) among others for the not unproblematic concept of “Sinographic Sphere”, which also included Korea, Japan, and Vietnam.

<sup>13</sup>The original Chinese text is available on the digital version of the Buddhist canon, see SAT 2018, T2053\_50.0239b12 ff. Xuánzàng’s biography has been translated in English by Beal (1911); see also Chaudhuri (1998: 29–30).

3. Xuánzàng's term in Chinese characters with the contemporary *pānyīn* rendering;
4. the interpretative translation of Xuánzàng's term.

Our translations are mostly (but not necessarily) based on Beal (1911), who assumes, if needed, the philosophical value of the characters in the Buddhist tradition, rather than their literal meaning.

- 1<sup>st</sup>, nominative *zhūfǎtǐ* 諸法體; Beal translates: “the substance, or basis, of the thing conceived”, since this same expression usually corresponds, in the Chinese Buddhist tradition, to the Sanskrit term *dharmasvabhāva* ‘the proper nature of the *dharma*’ (Hirakawa 1997: 1091). Therefore, in grammar, we may roughly translate it as ‘the essence’ (of a word).
- 2<sup>nd</sup>, accusative *suǒzuòyè* 所作業; Beal translates: “the deed done”. The literal meaning is ‘the activity performed’, but it obviously refers to ‘the thing that is done’, which corresponds to the direct object expressed by the accusative.
- 3<sup>rd</sup>, instrumental *zuòjùnéngzuòzhě* 作具能作者; Beal translates: “the means by which, and the doer”, which is consistent with the functions of the instrumental case according to Pāṇini.
- 4<sup>th</sup>, dative *suǒwéi* 所為; Beal translates: “(the one or the thing) for whom the thing is done”. Beal’s translation is too imaginative, since he literally quotes Pāṇini’s definition of the *sampradāna* ‘recipient’ (a semantic role canonically expressed by the dative).<sup>14</sup> However, the Chinese characters may not be given that interpretation. Our working hypothesis is to translate this expression as ‘the purpose’ (which is one of the possible functions of the dative case according to Pāṇini) as the character 為 *wéi* shows the meaning ‘purpose’, among many others, in some dictionaries of Buddhist terminology.
- 5<sup>th</sup>, ablative *suǒyīn* 所因; Beal translates: “what causes the thing”, which is consistent with one of the functions of the ablative case — not the main one, though — according to Pāṇini.
- 6<sup>th</sup>, genitive *suǒshǔ* 所屬; the genitive expresses ownership, so Beal translates it with the formulation “whose is the thing”.
- 7<sup>th</sup>, locative *suǒyī* 所依; Beal translated as “that which determines (*localizes*) the thing”, however, more simply, this could be translated as ‘the place where something is located’.
- 8<sup>th</sup>, vocative *hūzhào* 呼召; Beal translates: “the calling or summoning”.<sup>15</sup>

Xuánzàng’s terminology represents a mix, or a blending, of various possible sources.

- (i) Pāṇini’s *kāraka* labels understood in terms of their etymological value (cf. Xuánzàng’s definition of the accusative by using the non-technical meaning of the term *karman* ‘patient’, literally ‘the one which is done’).
- (ii) Pāṇini’s *kāraka* definitions (cf. Xuánzàng’s definition of the dative vaguely recalling Pāṇini’s definition of *sampradāna* ‘receiver’, as well as its secondary characterization as ‘purpose’).

<sup>14</sup>See *Aṣṭādhyāyī* 1.4.32 *karmanā yamabhipraiti sa sampradānam* ‘the person to whom one wishes to reach by the object is called *sampradāna*’.

<sup>15</sup>In some texts on the Buddhist doctrine Xuánzàng mentions the *vibhaktis* without including the vocative among them, cf. Xueshan (2020).

- (iii) Pāṇini's rules assigning *kāraḥ* to *vibhaktis* (thus, Xuánzàng's definition of the instrumental clearly derives from Pāṇini's *sūtra* 2.3.18 which assigns the expression of both *kartr* 'agent' and *karaṇa* 'instrument' to the same third case).
- (iv) Some post-Pāṇinian teaching tradition (thus, Xuánzàng's descriptions of genitive and vocative cannot be considered direct borrowings from the *Aṣṭādhyāyī*, since Pāṇini does not speak about ownership with reference to the former and does not consider the latter a case at all).

Xuánzàng must have borrowed this whole system from some medieval grammar-teaching tradition from Northern India, perhaps based on a simplified version of Pāṇini's grammar. It is highly unlikely for him to have first understood all the subtleties of Pāṇini's theoretical apparatus, only in order to mix them all up, later; therefore, we have to conclude that the confusion had occurred already in his source.

### 2.3 Xuánzàng's transcription of a nominal paradigm in Sanskrit

Xuánzàng also displays a specimen of a declension paradigm of a Sanskrit substantive, *puruṣa* 'man'. He uses Chinese characters phonographically, reproducing the declensional theme and the endings. Table 1 reports the first two cases (nominative and accusative) in the three numbers (singular, dual, and plural) from Xuánzàng's list; forms are given together with the underlying Sanskrit form, the Middle Chinese (henceforth, MC) reconstructions according to Baxter & Sagart (2014) and Pulleyblank (1991), as well as the contemporary *pīnyīn* reading.

Glosses	Sanskrit forms	Chinese text	Baxter & Sagart	Pulleyblank	Modern Chinese
NOM.SG	<i>puruṣaḥ</i>	布路殺	<i>puH-luH-sreat</i>	<i>poh-lɔh-ɣəit</i>	<i>bùlùshā</i>
NOM.DU	<i>puruṣau</i>	布路筓	<i>puH-luH-sraew</i>	<i>poh-lɔh-ɣəiw</i>	<i>bùlùshāo</i>
NOM.PL	<i>puruṣāḥ</i>	布路沙	<i>puH-luH-srae</i>	<i>poh-lɔh-ɣəi</i>	<i>bùlùshā</i>
ACC.SG	<i>puruṣam</i>	布路芟	<i>puH-luH-sraem</i>	<i>poh-lɔh-ɣəim</i>	<i>bùlùshān</i>
ACC.DU	<i>puruṣau</i>	布路筓	<i>puH-luH-sraew</i>	<i>poh-lɔh-ɣəiw</i>	<i>bùlùshāo</i>
ACC.PL	<i>puruṣān</i>	布路霜	<i>puH-luH-srjang</i>	<i>poh-lɔh-ɣəiaŋ</i>	<i>bùlùshuāng</i>

Table 1. Sanskrit nominal declension transcribed by Xuánzàng

In Xuánzàng's phonographic usage of the Chinese characters the first two syllables of the nominal stem are written *bùlù* 布路 (lit. 'to spread' and 'road') throughout the paradigm, while different characters are used to highlight the last consonant of the theme plus the nominal inflection: *shā* 殺 (lit. 'to kill') represents NOM.SG ending, *shāo* 筓 (lit. 'basket') renders both NOM.DU and ACC.DU, *shā* 沙 (lit. 'sand') is for NOM.PL, *shān* 芟 (lit. 'to cut down') is for ACC.SG, and *shuāng* 霜 (lit. 'frost') for ACC.PL.

Xuánzàng clearly attempts to render the phonetics of Sanskrit endings as close as he can. Two peculiarities must be observed by comparing Modern Chinese phonetic values (in *pīnyīn*) with the MC reconstructions. Thus, the endings of NOM.SG and NOM.PL differ in Sanskrit by the vowel length (*aḥ* and *āḥ*, respectively), but the Chinese characters used to transcribe them are homophonous in the contemporary pronunciation, since both *shā* 殺 and *shā* 沙 are pronounced with the same vowel and tone in Mandarin. However, if we look at the many possible reconstructions of MC, the two characters seem to have had different phonological forms in MC. Baxter & Sagart (2014: 74; 80) propose the following developments (OC stands for Old Chinese): \**s<r>at* (OC) > *sreat* (MC) > *shā* for 殺 'kill', but \**s'raj* > *srae* > *shā* for 沙 'sand'. Therefore, the two forms were not homophones in MC, which justifies Xuánzàng's choice of these two characters.



Concerning Xuánzàng's phonetic rendering of the retroflex fricative *ṣ*, it must be highlighted that Pulleyblank (1991)'s reconstruction of MC appears more appropriate as a rendering of the Sanskrit forms. Instead of Baxter & Sagart (2014)'s consonantal clusters, Pulleyblank proposes true retroflex sibilants here.

## 2.4 Kuījī's description of the Sanskrit case system

Xuánzàng's terminology seems to have had a great influence on his disciples and on the Japanese scholars as well, as the Chinese characters he used to identify the eight cases would spread both in China and in Japan and would be used by several scholars over the centuries. One of the most influential of Xuánzàng's disciples was Kuījī (窺基 632–682), who studied at the imperial translation bureau led by Xuánzàng.<sup>16</sup> Kuījī seems to have had a better proficiency in the theory of *kāraḥas* compared to his master.<sup>17</sup>

Hereafter we quote Kuījī's description of the eight cases. The structure of the list is complex, as he glosses each case with an additional label of Sanskrit origin. Therefore, in our discussion below we present the data by the following scheme:

1. the number of the *vibhakti* (the vocative counts as the eighth case);
2. the modern name of the case;
3. Kuījī's Sanskrit label, in Chinese characters (that he uses phonetically);
4. its modern *pīnyīn* transcription;
5. the underlying Sanskrit form, as it is traditionally restored;
6. our translation of Kuījī's description of the case;
7. our attempts to justify Kuījī's terminology and other commentaries.

Note that Kuījī is obviously inspired by his master's definitions, as can be seen from the fact that he generally uses at least some of the characters already used in Xuánzàng's account of the eight cases. The reason why Kuījī's apparently puts his labels in the form of LOC.SG will be discussed afterwards.

1<sup>st</sup>, nominative 僮利提勢 *nīlītīshī* (*nirdeśe*); Kuījī's description: *tīshēng* 體聲 'the case of the essence' and 汎說聲 *fànshuōshēng* 'the case of the general description'. Kuījī's usage of the term *tīshēng* 體聲 for 'nominative' may be a borrowing from Xuánzàng's description of the nominative as *zhūfǎtǐ* 諸法體 'the true nature of the *dharma*', as it shares the same character *tǐ* 體 (lit. 'body'), while the character *shēng* 聲 (lit. 'sound') was used to convey the idea of gender, number, and case in the Chinese tradition (cf. Pellin 2011: 318). The term *nirdeśa* is widely used in the Sanskrit grammatical literature as a meta-linguistic word referring to the "mention" of a certain term in Pāṇini's grammar (see Abhyankar 1977: 208). What is surprising is that — as far as we can tell — it is never used for indicating the 'nominative case' or the 'agent role'. Teng (2014) is probably correct in linking Kuījī's *nirdeśe* with the idea of *prātipadika-artha* 'the meaning of

<sup>16</sup>The following analysis is based on Kuījī's section in the Buddhist canon, which can be found in SAT 2018, T1831\_43.0613c03 ff. The translations are ours.

<sup>17</sup>The Sanskrit reconstruction follows Teng (2014: 116–117) who borrows the Sanskrit restorations from Lü Cheng (see Ouyang & Lü 1977: 17–18).

the nominal stem'. Effectively, in Pāṇini the first *vibhakti* (nominative) conveys no semantic role (*kāraka*), not even the agent (*karṭr*).<sup>18</sup> The *sūtra* dedicated to the nominative describes its uses as follows: it designates only 1) the meaning of the nominal stem; 2) its gender; 3) its “measure”; and 4) its number.<sup>19</sup> Therefore, Kuījī's choice of the term *nirdeśa* which literally means ‘mention’, as well as his second description of this case (on which see below), could be interpreted as an attempt to refer to the fact that the nominative indicates the lexical meaning of a word.

2<sup>nd</sup>, accusative 鄔波提舍泥 *wūbōtíshění* (*upadeśane*); Kuījī's descriptions: *yèshēng* 業聲 ‘the case of activity’ and *suǒshuōshēng* 所說聲 ‘the case of what is indicated’. The first term shares the character 業, lit. ‘activity’, with Xuánzàng's *suǒzuò yè* 所作業 ‘the deed done’. The term *upadeśana* is not mentioned in either Abhyankar's or Roodbergen's dictionaries; however, other derivatives of the same root *deś/diś* are largely attested in grammatical literature. Why does Kuījī use this term for the accusative remains a mystery. Notice, however, that the *diś*-derivatives in Pāṇini's grammatical tradition are often used for denoting opposed categories (e.g.: *upadeśa* ‘the input’ vs. *uddeśa* ‘the output’ of a grammatical rule; see Roodbergen 2008: 105; 108). Now, since there is an obvious grammatical opposition between *karṭr* and *karman* (roughly: subject and object), it might be not a case that two derivatives of *diś* have been used to name this dichotomy as well. Furthermore, the literal meaning of the root *diś* ‘to show, indicate’ could help solving the mystery of Kuījī's second description of the accusative, which has no parallels in Pāṇini's theory. In the Buddhist tradition the character 說 (used by Kuījī) usually translates exactly the Sanskrit root *diś* (Hirakawa 1997: 1079). Therefore, the second description might be simply the translation of the term *upadeśana* (the same explanation applies also to the second description of the nominative).

3<sup>rd</sup>, instrumental 羯唎迦囉泥 *jiédìlìjiālūōní* (*karṭrkarāṇe*); Kuījī's descriptions: *néngzuò jùshēng* 能作具聲 ‘the case of the instrument’ and *néngshuōshēng* 能說聲 ‘the case of the performer’. In Kuījī's usage of the characters 能, 作, and 具 Xuánzàng's influence is evident, if we recall the master's instrumental case, called *zuòjù* 作具, lit. ‘the means by which’ or *néngzuò* 能作, lit. ‘the doer’. Kuījī's twofold characterization of the third case is linked to Pāṇini's *sūtra* 2.3.18 *karṭrkarāṇayoh tr̥tīyā*, which states that the third *vibhakti* is used to express *karṭr* ‘agent’ or *karāṇa* ‘instrument’. Note that the phonological form of Kuījī's Sanskrit label is difficult to understand. The modern *pīnyīn* transcription is clearly too distant from the Sanskrit phonology. Baxter & Sagart (2014) provide no MC reconstructions of the six characters that are used in Kuījī's transcription, while Pulleyblank (1991) reconstructs five of them: 羯 → *kiat̚*, 唎 → *deɿ*, 迦 → ?, 囉 → *kia*, 泥 → *nej*. This MC form sounds a bit closer to the Sanskrit phonology than the modern *pīnyīn*.

4<sup>th</sup>, dative 三鉢囉陀儻雞 *sānbōluōtuōnǎjī* (*sampradānike*); Kuījī's descriptions: *suǒwéishēng* 所為聲 ‘the case of the purpose’ (reminding of Xuánzàng's *suǒwéi* 所為) and *suǒyǔshēng* 所與聲 ‘the case of the giving’ (where 與 *yǔ* implies ‘to take part in, to give’). The two Kuījī's descriptions describe the main functions of the dative case, namely: indicating the receiver and the goal of an

<sup>18</sup>According to Pāṇini, the *karṭr* ‘agent’ is expressed either by the active verbal endings, or by the instrumental case in a passive sentence, but never by the nominative

<sup>19</sup>See *Aṣṭādhyāyī* 2.3.46 *prātipadikārthalingaparimāṇavacanamātre prathamā*. There is no consensus on the meaning of Pāṇini's term *parimāṇa*; our translation as “measure” is only a widely accepted guess.



action. To be accurate, these two functions are ascribed, in two different Pāṇini's *sūtras*, to the *sampradāna* 'receiver', which is the semantic role canonically expressed by the dative.

- 5<sup>th</sup>, ablative 衰波陀泥 *bāobōtuóní* (*apādāne*); Kuījī gives only one description: *suǒcóngshēng* 所從聲 'the case of the origin', where 所從 means lit. 'where from' (thus differing from Xuánzàng's *suǒyīn* 所因 'what causes the thing'). Later, the second of the two characters 從, lit. 'to follow', became the standard label for the ablative in the Buddhist tradition. Note also that the first syllable of Kuījī's rendering of *apādāne* (OC *p<sup>h</sup>u*, MC *paw*, Mandarin *bāo*) is hard to justify phonetically.
- 6<sup>th</sup>, genitive 莎弭婆者儻 *suōmǐpózhěhǎng* (*svāmivacane*); Kuījī gives only one description: *shǔshēng* 屬聲 'the case of belonging' (recall Xuánzàng's *suǒshǔ* 所屬 'whose is the thing'). What is peculiar here is the term *svāmivacana* 'denoting the ownership'. Pāṇini does never use this term, or the word *svāmīn* 'owner', as well as the notion of ownership, with reference to the genitive. However, as Teng (2014: 117) remembers, this word appears in some later authors of the Pāṇinian school.<sup>20</sup> This might have been the source of Kuījī's Sanskrit label. Note also that in the Buddhist tradition Kuījī's character 屬 translates also the Sanskrit term *sambandha* 'bond' (Hirakawa 1997: 405), which is another possible epithet of the genitive in the Pāṇinian school of grammar.
- 7<sup>th</sup>, locative 珊儻陀那囉梯 *shānnǐtuónàluōtī* (*samnidhānārthe*); Kuījī gives only one description: *suǒyīshēng* 所依聲 'the case of what is localized' (thus overlapping Xuánzàng's *suǒyī* 所依 'that which localizes the thing'), and corresponds to the location, Pāṇini's *adhikaraṇa* 'place' (canonically expressed in the locative case). As for the Sanskrit label *samnidhānārthe*: the suffix *ārthe* (originally a LOC.SG of *artha* 'meaning') usually stands for 'in the meaning of', typically in grammatical commentaries, while *samnidhāna* (lit. 'proximity'), unattested as a technical term in Pāṇini or his commentators, is connected to other derivatives from the same stem (*samnidhi*, *samnidhāyana*) used in the grammatical literature.
- 8<sup>th</sup>, vocative 阿曼怛囉泥 *āmàndáluōní* (*āmantraṇe*); Kuījī gives only one description: 平聲 *píngshēng*; this term refers in Chinese grammatical tradition to one of the four MC tones, i.e. the "even tone" or the "level tone". Kuījī's definition is of difficult interpretation and seems having nothing to do with Xuánzàng's *hūzhào* 呼召 'the calling or summoning'.<sup>21</sup> On the other hand, Kuījī's Sanskrit label *āmantraṇa* means exactly 'calling, summoning' and goes back to one of Pāṇini's definitions of the vocative (*sūtra* 3.3.161; cf. Abhyankar 1977: 58).

A first general observation that can be made at this point regards the theoretical structure of the case theory that Kuījī relies on. It is based on a mixture of *kāraka* definitions, *vibhakti*-to-*kāraka* application rules and later comments. Clearly, it represents the stage of the grammar where the planes of forms and content have already collapsed.

However, the exact origin of Kuījī's Sanskrit labels is not entirely clear. They are not Pāṇinian, nor are they found in any other grammatical tradition of our knowledge.<sup>22</sup> However, from Kuījī onwards they became the standard denominations of Sanskrit cases in the Chinese Buddhist scholarly

<sup>20</sup>Thus, among the glosses of the genitive in *Kāśikāvṛtti* on *Aṣṭādhyāyī* 2.3.50, there is *svasvāmi-sambhandha* 'the link of the owner with the owned'.

<sup>21</sup>One possibility is to imagine the vocative as mainly the case used for naming the Buddha during prayers and rituals, which imply calm and a peaceful state of mind.

<sup>22</sup>This is also confirmed by Murata (1952: 154–155) and Teng (2014: 116–117).

tradition. For example, Hodus & Soothill (1975: 35) list the following “eight cases of nouns”: *nirdeśa*, *upadeśana*, *karṭṭkaraṇa*, *sampradāna*, *apādāna*, *svāmivacana*, *samnidhānārtha*, *āmantraṇa*.

These terms cannot come from the *Cāndravyākaraṇa* (5<sup>th</sup> cent.), the most influential Buddhist grammar. In the *Cāndravyākaraṇa* the *kāraḥ* have etymologically transparent labels, so that the abstract definitions of the *Aṣṭādhyāyī* are not needed. Some of the *kāraḥ* terms are radically different from Pāṇini's: *āpya* or *vyāpya* ‘patient’, lit. ‘something which the doer wants to achieve’ for *karman*; *avadhi* ‘origin’, lit. ‘limit’ for *apādāna*; *ādhāra* ‘location’, lit. ‘the support of an action’ for *adhikaraṇa* (see Chatterji 2003: 368; Saini 2007: 65–66). On the other hand, the *vibhakti* labels, as in Pāṇini, are listed with numerical labels. Therefore, Kuji's terminology does not match neither the *vibhakti*, nor the *kāraḥ* labels of the *Cāndravyākaraṇa*.

The Japanese scholarly tradition, starting from Takakusu (1896: 173; 224), see also Murata (1952: 155), affirms that these terms appear for the first time in Kāśyapa's *Bālābodbhana* (12<sup>th</sup>–13<sup>th</sup> cent.), a simplified version of the *Cāndravyākaraṇa*.<sup>23</sup> The thesis that *Bālābodbhana* might have been the source of Kuji is clearly untenable because of chronological reasons: Kuji obviously predates Kāśyapa. This implies that Takakusu is wrong when he attributes to Kāśyapa the first mention of these case labels.

One last issue regards the form of the case labels quoted by Kuji. His phonetic transcriptions are peculiar in rendering the last syllable of the Sanskrit terms with Chinese characters that in MC had mid-front vowels in coda (e.g., 勢 MC *syejH*; 泥 MC *nej*; 雞 MC *kej*; 梯 MC *tej* according to Baxter & Sagart 2014). For this reason, the traditional romanization of Kuji's labels present the *-e* ending.<sup>24</sup> Importantly, the terminations in *-e* are also confirmed by the *siddham* equivalents of Kuji's terminology, given by Annen (安然 841–915), a Japanese follower of Kuji, in his work called *Shittanzō* 悉曇藏 (“A treasure of *siddham*”, 880).<sup>25</sup>

The most obvious interpretation of the terminations in *-e* is that such terms appeared in the form of LOC.SG. As observed already by Teng (2014: 117), the locative was widely used in the Indian grammatical tradition to express the condition for a rule to apply. For example, in the well-known *sūtra* 1.4.23 *kāraḥ*, which starts the section where the definitions of the six *kāraḥ* are presented, the term *kāraḥ* is usually interpreted as a “heading locative”. Importantly, the section where the *vibhaktis* are assigned to *kāraḥ* always presents the locative form of the *kāraḥ* that is expressed by a certain *vibhakti*. Since Kuji's main topic is the *vibhaktis*, this might have been the source of his locatives.

However, the LOC.SG is unlikely as the quotation form for a noun, in Sanskrit. A less obvious explanation for the endings in *-e* is also possible. It has been already suggested that what appears as locative in the *sūtra* 1.4.23 *kāraḥ* can be possibly reinterpreted as a Middle Indian NOM.SG ending (see Keidan 2007). The NOM.SG ending in *-e* is attested in the literary Ardhamāgadhī, in Aśokan Prakrits (Salomon 1998: 74) and in Gāndhārī (Brough 1962: §76). Likewise, Buddhist Hybrid Sanskrit shows the NOM.SG in *-e* in some occurrences, even if the *-o* ending is more frequent (Edgerton 1953: 4; 50). It is highly plausible that Kuji followed the orthoepy of some grammatical school from an area in

<sup>23</sup>Goonetilleke (1884)'s partial edition of the *Bālābodbhana* includes the section on *kāraḥ* (pp. 143–144) which, however, presents the same *kāraḥ* terminology as its source, the *Cāndravyākaraṇa*, with no mention of such “unorthodox” labels as *nirdeśa*, *upadeśana*, *svāmivacana*, *samnidhānārtha*. Neither does so Seelaskhandha (1924)'s edition of the *Bālābodbhana* printed in Sinhalese script (we owe an immense gratitude to the anonymous reviewer who kindly provided us with a digital copy of this book and to Dr. Chiara Neri who helped us reading Sinhalese).

<sup>24</sup>Romanizations with the final *-i* have been also proposed, see Takakusu (1896: 173).

<sup>25</sup>See SAT 2018, from T2702\_84.0384c16 ff. Annen influenced several Japanese scholars to come (cf. Kondo 1992: 103)

which NOM.SG in *-e* was the standard and was therefore used also as the quotation form for a noun.<sup>26</sup> This is also consistent with the hypothesis that the main source from which the Buddhist texts started being translated into Chinese were documents written in Gāndhārī Prakrit (cf. Brough 1962: 50ff).<sup>27</sup>

## 2.5 Fǎzàng and the tree image

The *kāraka/vibhakti* system seems therefore to have arrived in China in its simplified version. After Kuījī, some other scholars, such as Yìjìng (義淨 635–713) and Fǎzàng (法藏 643–712), wrote about the eight cases of Sanskrit, calling them *bāzhuǎnshēng* 八轉聲 ‘eight changes of the case’, and exemplifying them by the paradigm of the word *puruṣa*. Fǎzàng’s innovation consists in explaining each of the eight cases with a participant of an imaginary scene of a tree being cut by a man with an ax for someone else.<sup>28</sup>

According to Fǎzàng, the first case expresses a “direct indication”, such as when a man is cutting a tree and we point at the man (人斫樹指說其人); the second case indicates something to which something else has happened, such as the tree which is being cut (所作斫樹); the third is the instrument with which something is done, such as the ax that cuts (由斧斫); the fourth indicates for whom something is done, such as the person for whom the tree is cut (爲人斫); the fifth expresses the causal relation, as in the idea of cutting to build a roof (因人造舍); the sixth indicates possession, as in the idea of a slave owned by the master (奴屬主); the seventh alludes to someone (a guest) who stays somewhere (客依主). The eighth case is not included in the image, and Fǎzàng only says that it is used to call (see also Chaudhuri 1998: 31).

Fǎzàng’s tree image has possibly a parallel in the Indian commentaries of the Pāṇinian school. In the Mahābhāṣya Patañjali uses the metaphor of a tree that is being cut to show that a semantic *kāraka*, such as the instrument, can be used as *kartṛ* on a “syntactic” level, as we would call it (that is, different semantic roles may become the subject of the sentence, see Keidan 2017). Patañjali proposes two examples for this phenomenon:

(3) *paraśunā chinatti*  
ax-INS.SG cut-3SG  
'(s/he) cuts with the ax'

(4) *paraśus chinatti*  
ax-NOM.SG cut-3SG  
'the ax cuts'

In (3) the form *paraśunā*, INS.SG of *paraśu* ‘ax’, is semantically the instrument of the action. In (4), on the contrary, the word *paraśus* ‘ax’ NOM.SG is semantically an instrument but is used as a *kartṛ*, i.e. the agent/subject of the sentence. So, even if with a different purpose, the tree image is well represented in Patañjali’s examples.

<sup>26</sup>At some stage of the Middle Indian the nominative ending varied freely between *-a*, *-o* and *-e* even within one sentence; this could just be an orthographical uncertainty due to the weakening of the final vowel, see Fussman (1989: 461).

<sup>27</sup>The spellings of the Gāndhārī NOM.SG of the “a-declension” show considerable variability, ranging from *-a* to *-e* and *-i*. Importantly, this Gāndhārī ending is often rendered with *-e* or *-i* when borrowed by other languages (cf. Mironov 1929 for Tocharian B, del Tomba 2022: 386 for Khotanese).

<sup>28</sup>Fǎzàng’s explanation is available through SAT 2018, starting from T1733\_35.0149a29.

### 3 The Japanese reinterpretation

#### 3.1 First attempts to apply the case system to the Japanese verb

The first Japanese author who discusses the cases of Sanskrit is Annen (841–915), who subsumes the totality of the Chinese accounts on this topic: Fǎzàng's tree image, Xuánzàng's semantic definitions, and Kuijī's Sanskrit labels, together with their *siddham* transcription.

Chronologically, the next relevant Japanese author is the anonymous author of an interesting Japanese Buddhist commentary called 八轉聲抄 *Hattenjōshō* ("Commentary on the eight cases"), written around the 13<sup>th</sup>–14<sup>th</sup> cent. (probably before 1336, see [Kondo 1992: 97](#)). In the first section of this treatise the author, who follows the classics, starts from showing the Sanskrit paradigm of the word *siddha* 'established' written in *siddham* script; afterwards, a specific single Chinese character is given to identify the function of each case (thus, the first case is labeled 體 lit. 'body, substance', the second 業 'work', the third 作 'produce, create', inspired by Xuánzàng and Annen) and the eight cases are explained by the tree metaphor.

The important innovation of this author is shown in the second section of the commentary, in which each Sanskrit case is connected to a specific inflected form of the Japanese verb *kiru* 'to cut' in the expression *ki kiru* 'to cut a tree'. In Classical Japanese the verb *kiru* was inflected by six forms, usually listed in a specific order, i.e. *kira-* (imperfective form), *kiri-* (continuative form), *kiru* (final form), *kiru* (attributive form), *kire-* (perfective form) and *kire* (imperative form).<sup>29</sup> Hereafter we list such connections.

- The first case is connected to the imperfective form *ki kirau* 'Shall I cut the tree' (the conjunctive particle *-u* is added to the end of the verb).
- The second, as well as the fourth, the fifth and the eighth cases, are connected to the attributive/final form *ki kiru* 'cut the tree' or 'who cuts the tree'. Note that the two forms are homonymous, so we cannot tell which one is intended exactly; however, in the second case, the attributive interpretation is more convincing, if we consider the meaning of the example given by the author.
- The third is connected to the continuative form *ki kiri* 'while cutting the tree'.
- The sixth and seventh cases are connected to the perfective/imperative form *ki kire* 'cut the tree!' (the two forms are homophonous, so we cannot tell which one was effectively intended).

[Kondo \(1992: 105\)](#) argues that these case-to-verbal inflection connections were not supposed to specifically explain the Sanskrit nominal inflection, but had rather the aim of illustrating the inflection as a general concept. The verbal forms were chosen since they show inflection in Japanese, contrariwise to nouns, which do not inflect.

However, there may be a different explanation. The traditional ordering in which the syllables are listed in Japanese is borrowed from the Indian *varṇamālā*, thus starting from the vowels, that are shown in the Indian order (*a, i, u, e, o*). This ordering appeared for the first time in the 11<sup>th</sup> century in a Buddhist environment and rapidly became widespread, influencing the traditional way of listing the different verbal forms. Therefore, as the imperfective form of the verb *kiru* 'to cut', *kira-*, ends with *-a* (the first vowel in the ordering), it is listed as the first; the continuative form *kiri* ends with *-i*, so

<sup>29</sup>For an introduction of the Classical Japanese verbal inflection see [Shirane \(2005\)](#).

it is listed as the second; likewise, the third and fourth forms are the final/attributive *kiru* ending in *-u*; the fifth and sixth are the perfective/imperative form *kire*, ending in *-e* (the verb *kiru* in Classical Japanese had no *-o* ending). Similarly, the *Hattenjōshō* lists the imperfective form at the beginning of the case list, and the perfective/imperative form at its end, starting with *kirau* (linked to the first case) and naming *kire* as the sixth and seventh element. It is thus plausible that the author aimed not only to explain inflection as a general phenomenon, but also to show the new order of syllables that was undergoing a process of standardization at that time.

### 3.2 Tsurumine's synthesis of Sanskrit and Western theories of case

The *Hattenjōshō* is one of the first attempts to apply morphological features of an Indo-European language to Japanese, but the Sanskrit influence continues to be evident even in the work of modern Japanese scholars. One example we decided to show is Tsurumine Shigenobu (鶴峯 戊申 1788–1859), who deals specifically with Sanskrit in several treatises (such as *Shittan Hitsuju*, *Bongo Shin'yaku*, *Shittan Senryakushō* and the like, see [Matsumura 1985](#)), and openly refers to it even in his Japanese grammar called *Gogaku shinsho* ([Tsurumine 1833](#)).<sup>30</sup>

Tsurumine is influenced by both European grammars (mostly Dutch, but also Latin), which were brought to Japan in the 18<sup>th</sup> cent. and translated into Japanese, and the Sanskrit grammatical tradition via the Chinese and Buddhist heritage. Since the European languages at his disposal are described by similar devices (including the notion of the case, alien to the traditional Japanese descriptions), he attempts to find the same fundamental principles or features in other languages as well, thus trying to create a unified theory of language (see also [Hatanaka 1996](#)). In particular, one fundamental principle he recognizes is the one corresponding to the character 格. Such ideogram was traditionally read *kaku*, with the literal meaning of 'status, law, method'. Later, it started to be used as a translation of the Dutch word *naamval* 'grammatical case'. However, Tsurumine gives this character a totally new reading, i.e. *sadamari* 'rule, arrangement'.<sup>31</sup>

Specifically, for the Japanese language he identifies nine *sadamaris*, or "rules", which apply both to nominal and verbal stems, and which are expressed by nominal particles or verbal auxiliaries agglutinated to the stem. As regards the nominal stems, he recognizes six "rules", corresponding to the six nominal cases he found in the European grammars.<sup>32</sup> In a previous work ([Tsurumine 1830](#)), he specifically notes that the Japanese system of "rules" must be described differently from the Sanskrit cases: for instance the dative "rule" in Japanese comprises both the Sanskrit dative (爲聲) and locative (依聲) cases, as they are both expressed by the particle *ni* in Japanese.<sup>33</sup>

The important feature of Tsurumine's framework, however, is the identification of three more "rules", associated with the Japanese verbal stems. First, he individuates three verbal tenses, expressed

<sup>30</sup> Another possible example is *Kango hattenshō gokusoku* 漢語八轉聲學則 ("Guidelines for Studying the Eight Cases of the Chinese Language") written by Kiben (基辨, 1718–1792); cf. [Zamorski \(2019\)](#).

<sup>31</sup> As often happens in Japanese philological tradition, when a label for some new concept is needed, a preexisting character is assigned a different pronunciation and meaning, while the graphical form is maintained, so that a metaphorical link with the original meaning of the character is also preserved.

<sup>32</sup> I.e. the cases of Latin including the vocative; Tsurumine's source was *Orandagohōkai* by Fujibayashi Fuzan (1815), a famous grammar of Dutch for Japanese readers, which, in turn, is an adaptation of Willem Sewel's *Nederduytsche Spraakkonst, Waarin de Gronden der Hollandsche Taale*, a grammar of Dutch from 1708.

<sup>33</sup> Note that Tsurumine opposes the nominative to the "secondary" cases (i.e., genitive, dative, accusative and ablative). The influence of the Chinese studies and of the Buddhist canon is evident, as the "secondary" cases are labeled 所格, where the first character was already used in the Buddhist canon to label these cases (see Xuánzàng). Interestingly, the same distinction between principal and secondary cases is noticeable in other texts on Dutch grammar written by Japanese scholars of that period, such as in Yoshio Shunzō's *Rokkaku Shinpen* (1814, see [Hattori 2017](#)).

respectively by the final form (present tense), continuative and perfective forms (past tense), and imperfective form (future tense). Each of these verbal forms, or bases, can be followed by verbal auxiliaries (but also particles) that agglutinate to the stem and express the “rule”. Tsurumine’s “verbal rules” are as follows:

- the “present rule”: the final base of the verb is followed by auxiliaries like *-meri* (presumptive), or *-ramu* (speculative);
- the “past rule”: the continuative base of the verb may be followed by several past auxiliaries like *-tari*, or *-nu*, which in turn may be followed by other auxiliaries; the perfective form is followed by the hypothetical *-ba*, or the concessive *-do*.
- the “future rule”: the imperfective base of the verb is followed by auxiliaries *-zu* (negative), *-ji* (negative speculative), *-mu* (speculative).

We wish to underline two things in this respect. First, the distinction proposed by Tsurumine seems to be based on a purely formal ground as he divides the auxiliaries according to which verbal base they are attached to. Thus, the negative auxiliaries express the same “rule” that is also expressed by the future/speculative ones, as both attach to the imperfective form.

Second, the same three “verbal rules” parallel the three verbal tenses found in the Dutch grammars by which Tsurumine is influenced. However, his identification of the three “verbal rules”, as well as his framework in general, allows us to highlight not only the influence he gained from his Western studies, but also the importance that Sanskrit studies had on his education. As stated above, the eight cases go by the name 八轉聲 (*hattenjō* in Japanese) in Chinese and Japanese Sanskrit studies, but the Chinese character *shēng* 聲 (*jō* in Japanese), lit. ‘sound, voice’, here translated as ‘case’,<sup>34</sup> is used also for a different category, called 十羅聲 (*jūrajō* in Japanese, lit. ‘ten *ra* sounds’). By *jūrajō* the Sanskrit scholars in Japan — as earlier in China — identify the so-called *lakāras* ‘L-affixes’, i.e., the ten technical symbols representing the Sanskrit tenses and moods of the verb in Pāṇini’s grammar.<sup>35</sup> In the introduction to his *Gogaku shinsho* Tsurumine overtly explains that the Japanese nominal particles and verbal auxiliaries (comprehensively called *teniwoha* at that time) expressing his nine “rules” would correspond to the eight *hattenjō* and to the ten *jūrajō* of Sanskrit. Moreover, in his attempt to reach a universal description of all the languages, he also includes the ten parts of speech and the four cases of Dutch in this equivalence, as well as the rules governing compound creation in Chinese. Thus, in his opinion, languages have similar fundamental principles (often expressed numerically), that allow them to behave alike.

## 4 Concluding remarks

To sum up the fate of Pāṇini’s theoretical idea of detaching semantics (*kāraka*) from morphology (*vibhakti*) in China and Japan, we would like to make the following remarks.

First, it is clear that Chinese scholars, and later their Japanese continuators, went into contact with an already simplified version of the Indian case-theory, produced by a later, perhaps Buddhist, grammar-teaching tradition. At this stage of the Indian syntactic theory the purely formal inflectional

<sup>34</sup>The same character was actually used also to mean gender, number and the like, see Pellin (2011).

<sup>35</sup>The L-affixes listed by Pāṇini are *laṭ* ‘present’, *lañ* ‘imperfect’, *luñ* ‘aorist’, *liṭ* ‘perfect’, *lṛṭ* ‘simple future’, *luṭ* ‘periphrastic future’, *leṭ* ‘subjunctive’, *lṛñ* ‘conditional’, *lin* ‘optative’, *loṭ* ‘imperative’, see Cardona (1988: §232).



categories (the *vibhaktis*) occupy a central place in the analysis, after having subsumed the functional load of the *kāraḥas*.

Second, the Indian source of the Chinese case-terminology is not a genuine Pāṇinian grammatical tradition, nor any Buddhist grammar of Sanskrit or Prakrit. Some of the case-labels, although they have a very familiar form for the reader of Indian grammatical literature, still have no direct antecedents in any Indian grammar known to us. Nevertheless, based on the final *-e* attested in such terms since the beginning, a Prakrit (Gāndhārī?) intermediation can be hypothesized.

Third, the notion of “case” has been applied in Japan also to the predicate, and — in later periods — even to the other parts of speech, including adjectives, adverbs, and conjunctions; for more details see D'Antonio (2018).

To conclude, we wish to remember the general importance of Sanskrit for the study of grammar in China and Japan by quoting Motoori Norinaga (1730–1801), one of the most well-known and studied Japanese linguists, who famously said: “All the people who intend to study the sounds must necessarily know Sanskrit” (cf. Ōno 1970).

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## References

- Abhyankar, K. V. 1977. *A Dictionary of Sanskrit Grammar*. Baroda: Oriental Institute.
- Baxter, W. & L. Sagart. 2014. *Old Chinese. A New Reconstruction*. Oxford: Oxford University Press.
- Beal, S. 1911. *Life of Hiuen Tsiang by the Shaman Hwui Li*. London: Kegan Paul, Trench, Trübner & Co.
- Boucher, D. 2017. Translations. In *The Oxford Handbook of Classical Chinese Literature (1000 BCE – 900 CE)*, 494–509. Oxford: Oxford University Press.
- Brough, J. (ed.). 1962. *The Gāndhārī Dharmapada*. London: Oxford University Press.
- Cardona, G. 1974. Pāṇini's *kāraḥas*: agency, animation, and identity. *Journal of Indian Philosophy* 2. 231–306.
- Cardona, G. 1988. *Pāṇini, His Work and Its Traditions. Background and Introduction*. New Delhi: Motilal Banarsidass Publishers.
- Chatterji, K. C. 2003. *Technical Terms and Technique of Sanskrit Grammar*. Kolkata: Sanskrit Pustak Bhandar.
- Chaudhuri, S. K. 1998. Siddham in China and Japan. *Sino-platonic papers* 88. 1–124.
- D'Antonio, C. 2018. The broad definition of grammatical case in Japan. *Rivista degli Studi Orientali* 91. 273–286.
- De Mauro, T. 1965. *Il nome del dativo e la teoria dei casi greci*. Roma: Accademia Nazionale dei Lincei.
- del Tomba, Alessandro. 2022. A diachronic study on the genitive-dative singular in Old Khotanese. *Indogermanische Forschungen* 127(1). 359–398.
- Denecke, W. 2017. Shared Literary Heritage in the East Asian Sinographic Sphere. In W. Denecke, W. Li & X. Tian (eds.), *The Oxford Handbook of Classical Chinese Literature (1000 BCE – 900 CE)*, 510–532. Oxford: Oxford University Press.

- Edgerton, F. 1953. *Buddhist Hybrid Sanskrit grammar and dictionary*. New Haven: Yale University Press.
- Fussman, G. 1989. Gāndhārī écrite, Gāndhārī parlée. In C. Caillat (ed.), *Dialectes dans les littératures indo-aryennes*, 433–501. Paris: Collège de France. Institut de Civilisation Indienne.
- Goonetilleke, W. 1884. The Bālāvabodhana. A re-arrangement of some of the more useful Grammatical Sūtras of Candra, with a Gloss by Kāsyapa Thera, edited with Explanatory and Critical Notes. In *The Orientalist*, vol. 1, 41–45, 69–72, 95–96, 120, 143–144, 168, 192, 216. London & Bombay: Trübner & Education Society's Press.
- Hatanaka, K. 1996. Tsurumine Shigenobu no bunpōron – kaku gainen no hen'yō. *Studies in Comparative Philosophy* 23. 73–79.
- Hattori, N. 2017. Edoki rangogaku ni okeru nihongo no kakurikai. Rokkaku Zenpen to Warangohōkai to hikaku shite. *Nihongo no kenkyū* 13(1). 18–34.
- Hirakawa, A. 1997. *A Buddhist Chinese-Sanskrit Dictionary*. Tokyo: The Reiyukai.
- Hodus, L. & W. E. Soothill. 1975. *A Dictionary of Chinese Buddhist Terms with Sanskrit and English Equivalents and a Sanskrit-Pali Index*. Taipei: Chengwen Pub. Co.
- Joshi, S. D. & J. A. F. Roodbergen. 1983. The Structure of the Aṣṭādhyāyī in Historical Perspective. In S. D. Joshi & S. D. Laddu (eds.), *Proceedings of the International Seminar on Studies in the Aṣṭādhyāyī of Pāṇini, held in July 1981*, 59–95. Pune: University of Poona.
- Keidan, A. 2007. Pāṇini 1.4.23: emendation proposal. *Rivista di Studi Sudasiatici* 2. 209–241.
- Keidan, A. 2015. Form, function and interpretation: a case study in the textual criticism of Pāṇini's Aṣṭādhyāyī. *Bulletin d'Études Indiennes* 32. 171–203.
- Keidan, A. 2017. Subjecthood in Pāṇini's Grammatical Tradition. In A. Crisanti et al (ed.), *Anantaratanaprabhava. Studi in onore di Giuliano Boccali*, vol. I, 107–125. Milano: Università degli Studi di Milano. Dipartimento di Studi letterari, filologici e linguistici.
- Kondo, Y. 1992. Kōzanjibon Hattenjōshō wo megutte. In *Kōzanji tenjaku monjo sōgō chōsadan kenkyū-hōkoku ronshū Heisei 3 nendo*, 95–107. Tōkyō.
- Lurie, D. B. 2011. *Realms of Literacy. Early Japan and the History of Writing*. Cambridge (Mass.): Harvard University Press.
- Matsumura, A. 1985. Tsurumine Shigenobu no Gogaku Shinsho to sono haikai. *Kokusai nihonbungaku kenkyūshūkai kaigiroku* 9. 85–105.
- Mironov, N. D. 1929. Kuchean Studies. I. Indian loan-words in Kuchean. *Rocznik Orientalistyczny* 6. 89–169.
- Murata, C. 1952. Chūgoku butten shoken no Panini. *Ōsaka gaikokugodaigaku gakuhō* 1. 149–160.
- Ōno, S. (ed.). 1970. *Motoori Norinaga Zenshū* 5. Tōkyō: Chikuma Shobō.
- Ouyang, J. & C. Lü. 1977. *Wei shi jue ze tan; Shengming lüe*. Taipei: Chuban.
- Pellin, T. 2011. A difficult case: a sketch of the different interpretations of the concept of 'case' in the early Chinese grammatical studies. In G. Hassler (ed.), *History of Linguistics 2008. Selected papers from the 11th International Conference on the History of the Language Sciences (ICHoLS XI), 28 August – 2 September 2008, Potsdam*, 317–326. Amsterdam: John Benjamins.
- Pulleyblank, E. G. 1991. *A Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese and Early Mandarin*. Vancouver: University of British Columbia Press.
- Roodbergen, J. A. F. 2008. *Dictionary of Pāṇinian Grammatical Terminology*. Pune: Bhandarkar Oriental Research Institute.
- Saini, R. S. 2007. *Post-pāṇinian systems of Sanskrit Grammars*. Delhi: Parimal Publications.
- Salomon, R. 1998. *Indian Epigraphy. A Guide to the Study of Inscriptions in Sanskrit, Prakrit, and the Other Indo-Aryan Languages*. Oxford: Oxford University Press.

- SAT. 2018. *The SAT Dayzōkyō Text Database*. <https://21dzk.l.u-tokyo.ac.jp/SAT/index.html> (2018).
- Seelaskhandha, C. A. (ed.). 1924. *Balawa Bodhana. An Abridgement of Chandra's Grammar*. Alutgama: Saddharmaparakasa Printing Works.
- Shirane, H. 2005. *Classical Japanese. A Grammar*. New York: Columbia University Press.
- Singh, J. D. 1974. Pāṇini's Theory of Kāraṅkas. *International Journal of Dravidian Linguistics* 3. 287–320.
- Takakusu, J. 1896. *A Record of the Buddhist Religion as Practised in India and the Malay Archipelago*. Oxford: Clarendon Press.
- Teng, W. 2014. Medieval Chinese Buddhist Exegesis and Chinese Grammatical Studies. *Taiwan Journal of Buddhist Studies* 28. 105–142.
- Tsurumine, S. 1830. *Gogaku kyūri kuhon kukaku sōkatsu zushiki*. Tōkyō.
- Tsurumine, S. 1833. *Gogaku Shinsho*. Tōkyō.
- Van Gulik, R. H. 1956. *Siddham. An Essay on the History of Sanskrit Studies in China and Japan*. New Delhi: Jayyed Press.
- Xueshan, Zhang. 2020. Buddhists' razor: how many *vibhaktayaḥ* are there? *Acta Orientalia* 80. 244–260.
- Zamorski, J. 2019. Sanskrit Grammar in Early Modern East Asia. A Study of Kiben's Guidelines for Studying the Eight Cases of the Chinese Language. *Fo Guang Journal of Buddhist Studies* 5(1). 267–306.
- Zürcher, E. 1959. *The Buddhist Conquest of China. The Spread and Adaptation of Buddhism in Early Medieval China*. Leiden: Brill.