



A note on the *Rājamṛgāṅka* of Bhoja published by the Adyar Library *

K. Madhava Krishna Kumar Śarma of the Adyar Library published (1940) the “reconstructed” Sanskrit text of a calendrical work of Indian astronomy under the title: the *Rājamṛgāṅka* of Bhoja. The published text comprises two chapters: (1) *Madhyamādhikāra*, dealing with the mean motion of the planets in 34 stanzas, and (2) *Spaṣṭādhikāra*, dealing with the true motion of the planets in 52 stanzas. There are two additional stanzas bearing the name of the astronomer Rāma appended after the second chapter which for obvious reason do not form part of the text. The text is followed by three astronomical tables.

There is no chapter dealing with eclipses and the heliacal rising of the planets, etc., and the book ends rather abruptly. The last stanza of the *Rājamṛgāṅka*, viz.,

इत्युर्वीपतिवृन्दवन्दित-
पदद्वन्द्वेन सद्बुद्धिना ।
श्रीभोजेन कृतं मृगाङ्क-
करणं ज्योतिर्विदां प्रीतये ॥

which Dikṣita quoted from a manuscript of that work consulted by him does not occur in Śarma’s edition.¹ Three and a half other stanzas quoted by Dikṣita from the same work do occur in his edition but there is remarkable difference of reading as can be seen by comparison:²

| Dikṣita’s version | Śarma’s version |
|---|---|
| नन्दाद्रीन्द्रग्निसंयुक्तान् भजेत्खाभ्राभ्रभानुभिः । शाकाब्दानविनष्टं तु भाजकाच्छेषमुत्सृजेत् ॥१७॥ | नन्दात्यष्ट्यग्निसंयुक्तान् भजेत्खाभ्राभ्रभानुभिः । शकाब्दानवशिष्टम् यद्- भाजकात्तत्समुत्सृजेत् ॥१६॥ |
| तयोरल्पं द्विशत्याप्तं बीजं लिप्तादिकं पृथक् । | तयोरल्पं त्रिगुणितं दशभक्तं विलिप्तिकाः । |

* K. S. Shukla, *Gaṇita*, Vol. 5, No. 2 (1954), pp. 149–151.

¹See Dikṣita, S. B., *Bhāratīya Jyotiṣaśāstra*, Second edition (1931), p. 238.

²The difference in the numbering of the verses is also notable.

| Dikṣita's version | Śarma's version |
|---|--|
| त्रिभिः शरैर्भुवा द्व्यक्षैः बाणैस्तिथिभिरब्धिभिः ॥१८॥ | त्रिभिः शरैर्भुवा द्व्यक्षैः बाणैस्तिथिभिरब्धिभिः ॥१७॥ |
| द्विकेन यमलेनैवं गुण्यमर्कादिषु क्रमात् । स्वं ज्ञशीघ्रे धरासूनौ सूर्यपुत्रेऽपरेष्वृणम् ॥१९॥ | द्वाभ्यां यमाभ्यां गुणितं बीजान्यर्कादिषु क्रमात् । स्वं ज्ञशीघ्रे धरासूनौ मन्दे पाते परेष्वृणम् ॥१८॥ |
| शकः पञ्चाब्धिवेदोः षष्टिभक्तोऽयनांशकाः ॥२५॥ | शकात्कृताब्धिवेदोनात् षष्ट्याप्ता अयनांशकाः ॥२४॥ |

Āmarāja, son of Mahādeva, who lived at Ānandapura about 150 years after Bhoja, in his commentary on the *Khaṇḍakhādya*³ of Brahmagupta, quotes the following four passages from the *Rājamaṛgāṅka* but none of them occurs in Śarma's edition:

1. धनर्णगैः सहस्रांशोः फलाल्लङ्कोदयासुभिः ।
हताद्राशिकलाप्तासुफलैः स्युः सूर्यवद्गहाः ॥
2. त्रिभमन्त्यफलोपेतं पदमाद्यं द्वितीयकम् ।
चक्रार्धान्तं व्यन्त्यफलं नवभान्तं तृतीयकम् ॥
ततश्चतुर्थं चक्रान्तं पदानि प्रतिमण्डले ॥
3. स्पष्टमध्यमयोरैक्यं दलितं मध्यसंज्ञकम् ।
स्पष्टमध्ययुतेरर्धात्कार्यं मन्दफलं ग्रहे ॥
स्पष्टीकरणयोग्ये च तस्माच्छीघ्रफलं ततः ।
तत्रैव त्वेवमसकृदवशेषात् स्फुटग्रहाः ॥
4. बिम्बार्धेन समं यस्य याम्यक्रान्तिभवं धनुः ।
तस्मिन्मध्यदिनस्थेऽर्के या छाया विषुवत्वसौ ॥

The above-mentioned discrepancies in Śarma's edition create strong suspicion regarding its authenticity. There is reason to suspect that it is not the original and full text of the *Rājamaṛgāṅka* but an abridged edition of that work by some later writer as is indicated by the second stanza of the first chapter wherein the author says:

We give out *the essence of the Rājamaṛgāṅka* for the computation of the planets.⁴

³This commentary was edited by Babua Misra and published by the Calcutta University in 1925.

⁴ ब्रूमो राजमृगाङ्कस्य सारं सिद्धौ युसद्गनाम् ।