

dates would then indicate periods when the winter solstice coincided with the Caitri or the Vaiśākhi full moon. But Oldenberg¹² and Thibaut¹³ seem clearly right in holding that the coincidence of Phālgunī with the beginning of spring,¹⁴ which is certain, is fatal to this view, and that there is no difficulty in regarding this date as consistent with the date of the winter solstice in the new moon of Māgha, which is given by the Kauṣītaki Brāhmaṇa,¹⁵ and which forms the basis of the calculations of the Jyotiṣa.¹⁶ The full moon in Phālguna would be placed about one month and a half after the winter solstice, or, say, in the first week of February, which date, according to Thibaut, may reasonably be deemed to mark the beginning of a new season in India about 800 B.C. At the same time it must be remembered that the date was necessarily artificial, inasmuch as the year was divided into three seasons, each of four months, and the Indian year does not in fact consist of three equal seasons. The variations of the other datings would then not be unnatural if any school wished to defer its spring festival, the Vaiśvadeva, to the time when spring had really manifested itself. See also *Samvatsara*.

¹² *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 48, 630 *et seq.*; 49, 475, 476; 50, 453-457.

¹³ *Indian Antiquary*, 24, 86 *et seq.*

¹⁴ See Taittirīya Brāhmaṇa, i. 1, 2, 6, 8; Śatapatha Brāhmaṇa, xiii. 4, 1, 2-4. So the Phālgunī full moon is called 'the mouth of the seasons (*ṛtūnām mukham*)'—e.g., Pañcaviṃśa Brāhmaṇa, xxi. 15, 2; Kāthaka Samhitā, viii. 1; Maitrāyaṇī Samhitā, i. 6, 9; and the first season is always spring: Śatapatha Brāhmaṇa, i. 5, 3, 8-14;

ii. 1, 3, 1; vii. 2, 4, 26; xi. 2, 7, 32; xii. 8, 2, 34; xiii. 5, 4, 28; Taittirīya Samhitā, ii. 1, 2, 5; Kāthaka Samhitā, xiii. 1, 7, etc. See Weber, *Naxatra*, 2, 352.

¹⁵ xix. 3.

¹⁶ Thibaut, *Astronomie, Astrologie, und Mathematik*, 17, 18.

Cf. Weber, *Naxatra*, 2, 329 *et seq.*; Whitney, *Journal of the American Oriental Society*, 16, lxxxvi., lxxxvii.; Keith, *Journal of the Royal Asiatic Society*, 1909, 1101-1104.

Cāndhanāyana is the patronymic of Ānandaja in the Vamśa Brāhmaṇa.¹

¹ *Indische Studien*, 4, 372, 383.

Cāyamāna is the patronymic in the Rigveda (vi. 27, 5, 8) of Abhyāvartin.