Annexure A

Let the above figure represent the observer's celestial sphere at the latitude of Kurukṣetra. Here PZQHH' is the observer's meridian, HE<KHH' the horizon, QEQ' the celestial equator and γSLK the ecliptic. S indicates the sun's position at 18° below the horizon. According to our interpretation $\gamma = 30°$, when it was the beginning of Indian spring. $\alpha$ is the point on the horizon where $\alpha - Arietis$ rose at the time. Z and P respectively denote the Zenith and the celestial pole of the observer. Join $P\gamma$ and PS by arcs of great circles, PS cutting the celestial equator at M. Draw $\alpha$L perpendicular to the ecliptic.

For 1931 A.D., $\alpha$ Arietis had its—

(1) mean celestial longitude = $36° 41' 50''$ and

(2) mean celestial latitude = $9° 57' 46''$ N which is taken to remain constant.

The $\angle EyK$ obliquity of the ecliptic

$= 24° 6' 35''$ according to our assumption which was true for 4000 B.C.

(a) In the triangle $\gamma SM$, we have $\gamma M = 27° 47' 18''$, and $SM = 11° 47''$

(b) In the triangle $PZS$, $ZS = 108°$; $SP = 101° 47'$ and $PZ = 60°$. The angle ZPS is given by,—
\[
\tan \frac{ZPS}{2} = \sqrt{\frac{ZS + PS - PZ}{2} \times \frac{ZS + PZ - PS}{2}} \times \frac{ZS + PZ - PS}{2} \times \frac{ZS + PS + PZ}{2} \times \frac{PS + PZ - ZS}{2}
\]

Hence we find the angle \( ZPS = 103° 20' 54'' \)

(c) Again in the triangle \( EyK \), \( \angle KEy = 120° \);
\( Ey = \angle ZPS + \angle SPy - 90° \)
\( = 103° 20' 54'' + 27° 47' 18'' - 90° \)
\( = 41° 8' 12'' \);
and \( \angle E\gamma K = 24° 6' 35'' \)
The arc \( \gamma K \) is given by,
cot \( \gamma K \sin E\gamma = \cos E\gamma \cos 24° 6' 35'' \)
\(-\tan 30° \sin 24° 6' 35'' \)
\(= \frac{\cos E\gamma \times \cos (24° 6' 35'' + \phi)}{\cos \phi} \)

Where \( \phi \) is given by \( \tan \phi = \frac{\tan 30°}{\cos E\gamma} \)

Whence \( \phi = 37° 28' 25'' \);
\( \therefore \gamma K = 55° 31' 51'' \).

(d) From the same triangle we then find angle \( K \), which becomes \( = 43° 43' 17'' \).

(e) Lastly from the small right-angled triangle \( K\alpha L \), we obtain \( KL \) by the equation,
\( \sin KL = \tan \alpha L \times \cot K \)
\(= \tan 9° 57' 46'' \times \cot 43° 43' 17'' \)
\( \therefore K\angle = 10° 35' 7'', \alpha L \) being the celestial latitude of \( \alpha Aries \) for 1931 supposed to remain constant throughout.

Thus, at the time which we want to determine, the celestial longitude of \( \alpha Aries \) was,——
\(= -\gamma L \)
\(= -(\gamma L - KL) \)
\(= -44° 56' 44'' \)

For 1931 A.D., the celestial longitude of \( \alpha Aries \) as stated before, was \( = 36° 41' 50'' \). Hence the total change till 1931 A.D. in the celestial longitude of \( \alpha Aries \) worked out to have been
\[=36^\circ 41' 50'' + 44^\circ 56' 44'' = 81^\circ 38' 38''\], which represents a lapse of 5,925 years, ignoring the proper motion of \(\alpha\) Arietis. The date becomes 3995 B.C. which may be set down as 4000 B.C.

This was very nearly the date when, it is alleged, Tvaṣṭr communicated to Dadhīchi the celestial signal of the heliacal rising of \(\alpha\) Arietis for the advent of spring at the latitude of Kurukṣetra.

(Anc : Ind : Cr : Sengupta : p. 65-67)

Annexure B

Let the above figure represent the observer's sphere at the latitude of Kurukṣetra; HPZQH' is the meridian, H<KEH' the horizon, QEQ' the celestial equator, Z and P are respectively the zenith and the celestial pole.

Let S be the position of the sun at 18° below the horizon, so that ZS = 108°. The sun is at the summer solstice.

We take \(\omega\) the obliquity of the ecliptic = 24°.6' 35'' which was true for 4000 B.C. In the figure γKS is the ecliptic, cutting the horizon at the point K. The point \(\alpha\) on the horizon is the position of \(\alpha\) Leonis when it is just on the horizon, although it would be raised above it by about 35' due to refraction; from a at \(\alpha\)L be drawn a perpendicular to
the ecliptic so that \( \gamma L \) was the celestial longitude of \( \alpha Leonis \) at the time we propose to determine.

The celestial longitude of \( \alpha Leonis \) for 1931 A.D. is \( 148^\circ 52' 11'' \); the celestial latitude of \( \alpha Leonis \) for 1931 A.D. is \( 0^\circ 27' 26'' \), which is supposed to remain constant.

1. In the triangle \( ZPS \), the side \( ZP = 60^\circ \), \( PS = 65^\circ 53' 25'' \) and \( ZS = 108^\circ \); the angle \( ZPS \) is given by,

\[
\tan \frac{ZPS}{2} = \sqrt{\frac{\sin \frac{ZS+PS-ZP}{2} \times \sin \frac{ZS+ZP-PS}{2}}{\sin \frac{ZS+PS+ZP}{2} \times \sin \frac{PS+ZP-ZS}{2}}}
\]

\[\therefore ZPS = 130^\circ 29' 16'';\]
\[\therefore EPS = 40^\circ 29' 16'';\]
\[\therefore \gamma E = 40^\circ 30' 44''.\]

2. In the triangle \( KE\gamma \), the four consecutive parts are
\[\angle KE\gamma = 120^\circ, \ E\gamma = 49^\circ 30' 44'', \ E\gamma K = 24^\circ 6' 35'' \text{ and } \gamma K.\]
Hence \( \gamma K \) is given by, \( \cot \gamma K \sin 49^\circ 30' 44'' = \cos 49^\circ 30' 44'' \times \cos 24^\circ 6' 35'' - \tan 30' \times \sin 24^\circ 6' 35'' \)
we use the auxiliary angle given by
\[
\tan \phi = \frac{\tan 30'}{\cos 49^\circ 30' 44''}, \therefore \phi = 41^\circ 38' 38''
\]
\[\therefore \cot \gamma K = \frac{\cot 49^\circ 30' 44'' \times \cos 65^\circ 45' 13''}{\cos 41^\circ 38' 38''}
\]
\[\therefore \gamma K = 64^\circ 50' 38''.\]

3. In the same triangle \( KE\gamma \), the angle \( K \) is given by.
\[
\sin K = \frac{\sin \gamma E \times \sin 120^\circ}{\sin \gamma E}
\]
\[\therefore \angle K = 46^\circ 41' 29''
\]

4. In the triangle \( K < L \), we have \( K = 46^\circ 41' 29'' \), the angle \( L \) is a right angle, and \( \angle L = 27' 26'' \).
\[\therefore KL = 25' 51''\]
We have found before that \( \gamma K = 64^\circ 50' 38''.\)
Now \( KL = 25' 51''\)
\[\therefore \gamma L = 65^\circ 16' 29''\]
Now the celestial longitude of \( \alpha Leonis \) for 1931 A.D. is \( 148^\circ 52' 11'' \) and the celestial longitude of \( \alpha Leonis \) for the required past date is \( 65^\circ 16' 29''.\)
ANNEXURE C

.: the increase in celestial longitude of $\alpha$ Leonis during the entire period $= 83^\circ 35' 42''$.
The mean precession rate for the period $= 49''.5938$
Annual proper motion of $\alpha$ Leonis $= 0''.2478$
.: the mean annual variation in longitude of $\alpha$ Leonis $= 49''.3460$.
.: the lapse of years till 1931 A.D. $= 6100$ nearly.
.: the date $= 4170$ B.C.

(If the sun’s depression below the horizon were taken at $17^\circ$, the calculated date would come out to be nearly 4000 B.C.).

Anc : Ind : Cr : Sengupta, pp. 77-79

Annexure C

*Mean tropical longitudes of stars on 1.1.1976 at 10.8 h, I.S.T.*

<table>
<thead>
<tr>
<th>Indian name of the star</th>
<th>Star name</th>
<th>Tropical longitude on 1.1.1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aśvinī</td>
<td>$\beta$ Arietis</td>
<td>$33^\circ 38' 4''.8$</td>
</tr>
<tr>
<td>2. Kṛttikā</td>
<td>Alcyone or n Tauri</td>
<td>$59^\circ 39' 24''.8$</td>
</tr>
<tr>
<td>3. Rohiṇī</td>
<td>Aldebaran or a Tauri</td>
<td>$69^\circ 27' 12''.8$</td>
</tr>
<tr>
<td>4. Mrgaśiras</td>
<td>$\lambda$ Orionis</td>
<td>$83^\circ 22' 16''.8$</td>
</tr>
<tr>
<td>5. Puṣyā</td>
<td>$\delta$ Cancri</td>
<td>$128^\circ 23' 10''.8$</td>
</tr>
<tr>
<td>6. Aślesā</td>
<td>$\epsilon$ Hydrae</td>
<td>$132^\circ 0' 40''.8$</td>
</tr>
<tr>
<td>7. Maghā</td>
<td>Regulus or a Leonis</td>
<td>$149^\circ 29' 42''.8$</td>
</tr>
<tr>
<td>8. P. Phālguṇi</td>
<td>$\delta$ Leonis</td>
<td>$160^\circ 58' 44''.8$</td>
</tr>
<tr>
<td>9. U. Phālguṇi</td>
<td>Denebola or $\beta$ Leonis</td>
<td>$171^\circ 17' 2''.8$</td>
</tr>
<tr>
<td>10. Hastā</td>
<td>$\delta$ Corvi</td>
<td>$193^\circ 7' 3''.8$</td>
</tr>
<tr>
<td>11. Citrā</td>
<td>a Virginis</td>
<td>$203^\circ 30' 21''.8$</td>
</tr>
<tr>
<td>12. Viśākhā</td>
<td>a Libra</td>
<td>$224^\circ 44' 51''.8$</td>
</tr>
<tr>
<td>13. Anurādhā</td>
<td>$\delta$ Scorpii</td>
<td>$242^\circ 14' 8''.8$</td>
</tr>
<tr>
<td>14. Jyeṣṭhā</td>
<td>Antares or a Scorpii</td>
<td>$249^\circ 25' 36''.8$</td>
</tr>
<tr>
<td>15. Śravaṇā</td>
<td>Altair</td>
<td>$301^\circ 26' 13''.8$</td>
</tr>
<tr>
<td>16. Revatī</td>
<td>$\tau$ Piscium</td>
<td>$19^\circ 32' 28''.8$</td>
</tr>
</tbody>
</table>

(As per Lahiri’s Ephemeris)
Annexure D

The Statesman—22nd October 1975

Age of Mahābhārata War: Appeal to Historians

Bijnor, Oct. 19—Mr. B. P. Sinha, former Chief Justice of India, today appealed to historians not to jump to conclusions in regard to fixing the time of the Mahabharata War, reports PTI.

Inaugurating a three-day seminar on "the age of the Mahabharata war", organized by Viḍur Sewa Ashram, Mr. Justice Sinha said that even scholars were human beings and prone to commit errors.

Quoting Vincent Smith and Sir John Marshall's views on Indian history and the Indus Valley civilization, he said further researches had proved they were wrong. The Western scholars propounded the theory that Moenjo Daro and Harappan civilizations were local but excavations carried out by other Western and Indian archaeologists proved these civilizations were as old as Babylonian and Egyptian civilizations.

Mr. Justice Sinha said historians brought up in Graeco-Roman culture believed that Graeco-Roman civilizations were older than the Indus Valley civilization. But later they themselves found India's to be older than the Graeco-Roman. He, therefore, appealed to Indian historians and Vedic scholars not to take hasty decisions but do more research on the subject and conduct excavations at places associated with the Mahabharata war.

Annexure E

The Statesman—October 28, 1975

Mahābhārata War Not A Myth, Say Scholars

NEW DELHI, Oct. 27—Though there are conflicting views about the date of the Mahabharata war between the Kauravas and the Pandavas, it is not a myth as was held by Dr. H. D. Sankalia. This is the considered view of historians, Vedic scholars and astronomers who took part in a three day
seminar organized by the Vidur Seva Ashram near Bijnoore in Uttar Pradesh from October 19 to 21, reports PTI.

A couple of decades ago, there were four schools of thought about the date. One held that the war commenced around 5100 B.C.; the second put the date at 3100 B.C.; the third at 1400 B.C.; and the fourth at 900 B.C. Today the exponents of the first and the last schools of thought have disappeared. Vedic and Sanskrit scholars now believe the war was fought in 3000 B.C. while modern historians and astronomers put the date between 1414 B.C. and 1400 B.C. This viewpoint had been propounded earlier and defended stoutly by eminent men like Bal Gangadhar Tilak, R.C. Majumdar and Pandit Sitanath Tatvabhusan.

During the three-day deliberations, the Vedic scholars mainly depended on the “Nakshatradigana” mentioned by characters like Bhishma, Krishna and Karna in the Mahabharata and also references to these facts in Upanishads and the Mahabhagavatam. They did not take into consideration the dates of the later dynasties or the evidence available in the form of rock inscriptions, clay tablets pertaining to the later kings for fixing the date of the war.

The modern historians and astronomers attending the seminar pointed out that if was necessary to take into account the dates relating to dynasties like the Sakyas, Mauryas, Nandas and Guptas to arrive at the truth. They said if the viewpoint of the Vedic scholars was to be accepted, Ashoka had to be pushed back to 1474 B.C., Chandragupta Maurya to 1536 B.C., and Buddha to 1800 B.C.

Swami B. H. Bon Maharaj, founder-president of the Institute of Oriental Philosophy, Vrindaban, in his presidential address, said that in fixing the date at 3136 Pausa-Amavasya B.C., he was depending mainly on the Mahabhaagavatam, the commentary written on this “Itihasa” by Jiva Goswami and Surya Siddhanta.

He said that according to the Mousala Parva of the Mahabharata, the war was fought 36 years before the passing
away of Lord Krishna and that was the beginning of 'Kali Yuga'. Therefore, the war was fought towards the end of 'Dwapara Yuga' and only 36 years before the beginning of Kali Yuga. "If we calculate on this basis the date will be 3136 B.C., Amavasya of February."

Another supporter of this theory was Prof. K. Srinivasa Raghavan of the Aurobindo Study Circle, Madras. He said the Mahabharata was of astronomical data which were found to be consistent. In spite of this fact, he said, Western astronomers and historians refused to take such data into consideration.

Most of the Indian astronomers, even 30 years after independence, were still afraid of proclaiming the truth as they see it from the Mahabharata text, he said.

Prof. Raghavan said the 'Rajasooya Yaga' was performed by Yudhishtira on the Amavasya day with Prestha and Moola Nakshtras, i.e. on the exact completion of this day the sun was at 240.2 degrees of the zodiac.

Fifteen years later and just before the beginning of the war, Krishna and Karna decided the day for commencing the war (Udyoga Parva, chapter 143). That day was decided as Amavasya combined with Jeshta Nakshatra. Working forward from Rajasooya day, it is found that at this amavasya the sun was at 224.75 degree of the zodiac and this was the beginning of Jeshta.

Prof. Raghavan said three lunations later the Amavasya ended with the sun at 312.06 degrees of the zodiac and therefore on the Shukla Ashtami day of the month of Magha the sun was at 318.6 degrees of the zodiac and on this day Bhishma went to heaven. On this day the moon was at a distance of 90 degrees from the sun, i.e. the moon was in Rohini Nakshatra and this was given clearly by Bhishma himself in the Shanti Parva, chapter 46, Sloka 3.

This clearly indicated, Prof. Raghavan said, that Bhishma's death occurred on Magha Shukla Ashtami in Rohini Nakshatra and with the sun at 318.86 degrees of the zodiac.
Therefore, on the Radha Saptami day, the day on which the sun turns north, the sun was 316.5 degrees of the zodiac. Thus it was the beginning of the Vasantha Ritu and the equinox was at 46.5 degrees of the zodiac.

He said at present, in 1975, the Vasant Ritu beginning or the equinox was at minus 23.4 degrees of the zodiac. Therefore, he said, the equinox had slipped back by 69.9 degrees of the zodiac.

Prof. Raghavan said the average rate of slipping of the equinox, termed as the precision of the equinox, was 72.5 years per degree. Hence, the interval between the year of the Mahabharata war and 1975 A.D. is 69.9 multiplied by 72.5 which comes to 5068 years or 3093 B.C.

He said that on the Jeshta day, mentioned by Krishna in Udyoga Parva, it was also stated that the Jupiter and the Saturn were at Rohini and the sun, moon and Rahu were at Jeshta, causing a solar eclipse. Calculating from this event one would obtain the date as October 13, 3067 B.C. On this day the Saradritu (or autumn equinox) begins with the sun at 224.75 degrees of the zodiac but the Amavasya comes earlier than the Saradritu. Therefore, Prof. Raghavan said, this Amavasya begins in the ‘antimasa’ (extra month). The next Amavasya begins in Margasira month (November 11, 3067 B.C.). Therefore on the Shukla Ekadasi only day of this Margasira month the Mahabharata war started, giving the day and date as Margasira Shukla Ekadasi, Friday, with Krittika Nakshatra or November 22, 3067 B.C. (Julian day 601528).

Annexure F

The Statesman—29th October 1975

‘Mahabharata War was Fought in 1400 B. C.’

New Delhi, Oct. 28—Data in rock inscriptions in India, and correlating evidence in histories of countries like Sri Lanka, Afghanistan and China all suggest that the
Mahabharata war occurred perhaps between 1414 B.C. and 1400 B.C., reports PTI.

This was the view advanced by some scholars at the seminar at Vidur Seva Asram, Bijnore last week.

According to the proponents of this view any attempt to accept 3138 B.C. as the date of the Mahabharata war would involve not only the rewriting of Indian history to push back dates of Asoka, Chandragupta Maurya and Buddha, but also Egyptian and Greek histories.

Mr. Kailash Chandra Varma, a scholar in history, astronomy and Vedic Literature, in his paper said if 3000 B.C. was to be accepted as the Mahabharata age, an examination of the dates between 3138 B.C. and 327-28 B.C. showed that in an interval of about 2800 years 32 Brihadrathas and 12 Sisunagas up to Mahananda would have reigned, working out an average of 67 years per king. Such an average, he said, has never been found in any country in the world ever since 3500 B.C. when the first king of the first dynasty of Egypt came to power.

Moreover, he said, this date of 3138 B.C. as the year in which the Mahabharata war was fought, was arrived at, in all probability, because of the belief that Kaliyuga started in 3102 B.C. and it could not have arrived earlier than Sri Krishna's Nirvana.

Mr. Varma said if this date was accepted then Indian historians would have to alter not only their own history but also the histories of other countries. Indian history would have to be rewritten pushing back age of Asoka to 1474 B.C., Chandragupta Maurya to 1536 B.C. and Buddha to 1800 B.C.

This alteration would clash with the well-established chronology of Egypt. This chronology was based on contemporary inscriptions since the time of at least the fifth dynasty there and this could not be dated later than about 2800 B.C. This calculation, he said, was based on the astronomical cycle of the coincidence of the first day of the civil calendar with the rise of Sothis i.e. Sirius which used to take
1460 years since the Egyptians consistently omitted to incorporate the "leap year" in their reckoning.

He said this presumption would affect Greek history and paleography. Herodotus in the fifth century B.C. acknowledged that the Greeks had obtained their alphabet from the Phoenicians whose date works out to about 750-700 B.C. and the Greeks acknowledged that they had been illiterate before this period. He said that in the Greek inscriptions of Asoka (Kandahar inscriptions) found in Afghanistan four Greek letters for 'eta', 'xi', 'psi' and 'omega' were found and they were incorporated in Greek alphabet in 402 B.C.

Mr. Varma said fixing date of the Mahabharata war in 3138 B.C. would mean pushing back the Greek adoption of the alphabet to 2900 B.C. and the incorporation of the four letters in the Asokan inscription would have to be dated 1602 B.C.

Again, he said, it would mean starting the Gupta era from about 328 B.C. This was contradicted by the evidence of Alberuni who on the information given by Indian scholars in the middle of the 11th century, was able to identify the Gupta era with the Vallabhi era and this enabled Dr. Fleet to establish that the Gupta era was equivalent to 319 A.D.

He said the date in the Vikrama era in the Mandasaur inscription of Bandhu Varma and Kumaragupta II referred to 473 A.D. Thus again the date of the Gupta era was confirmed as 319 A.D.

Mr. Varma said this date was also confirmed by Mr. P. C. Sen Gupta in his book the "Ancient Indian Chronology" after examining astronomical statements contained in 12 inscriptions, including the one of the Gupta year 165.

Mr. Varma said attempts to push back the date of the Mahabharata war would also interfere with the chronology of Sri Lanka which, on account of its contact with the well-established chronology of China since 841 B.C. maintained an accurate account of their kings. This Sri Lanka chronology was
based on the Buddhist era there. According to Dr. Paranavitana, the starting point of the Buddhist era in Ceylon was 544 B.C. This scholar fixed this date on the basis of an inscription dated 398 A.D. of King Upatissa I (A.D. 368-410). It was an established fact that an envoy was sent to China by King Mahanama, son of Upatissa I (A.D. 410-432) and his Ambassador was received in 428 A.D. by the Chinese emperor. Thus linking the Ceylonese chronology with the well-established chronology of China and the latter's dates from 841 B.C. were found to be very accurate.

Mr. Varma said the inscription stated that it was set up in the 28th year of the reign of Mahanama. It not only gave the month, "Nakshatra" etc but also added that it was the 941st year of the Buddha's Nirvana.

He said Meghavarna of Ceylon belonging to the first half of the fourth century A.D. sent an ambassador to Samudragupta.

If any attempt was made to upset the date 544 B.C. as the starting point of the Buddhist era in Ceylon it would also distort the synchronization of the periods of Chandragupta Maurya, Stulabhadra, Bhadrabahu and Subhadra (Jain scholars of that period). Thus it was not possible to push back the dates of the Gupta era. Asoka Chandragupta Maurya and Buddha Nirvana beyond 319 A.D., 274 B.C., 325 B.C. and 544 B.C. respectively.

Mr. Varma said that from this data it was now possible to make a tolerably accurate date for the Mahabharata war. He said Buddha, Prasenajita of Kosala, Chanda Pradyota of Avanti and Udayana of Kausambi were contemporaries according to Buddhist scriptures and they were 24 generations after the Mahabharata war. Now it was a well-established fact that there could not be more than three generations to a century (accepted by historians since Herodotus).

Very recently Mr. Mr. G. S. Basu, in his "Puranaprasvesa", on biological and Yuga Ganana of the Puranas, came to the same conclusion, 33 years per generation, and
this had been confirmed by epigraphic evidence of known dated dynasties.

This would lead, Mr. Varma said, to the conclusion that the Mahabharata war took place in 1416 B.C. on the basis of Buddha's birth in 624 B.C. plus 24 generations multiplied by 33 years of average rule per king.

Mr. Varma said the other calculation was that 32 Brthadrathas ruled over Magadha after the Mahabharata war for 700 years. They were followed by the Sisunaga dynasty of 12 rulers lasting 362 years; then came Mahapadma Nanda and his dynasty was supplanted by Chandragupta Maurya in 325 B.C. This would work out to 1397 B.C. and thus by all calculations the Mahabharata war could not have been fought earlier than 1400 B.C. Mr. Varma asserted.

Puru-Kuru Line

Dr. Hari Anantha Phadke, research officer, "history of Knrukshetra"—a project sponsored by the Haryana Government—placed the war some time in the latter half of the ninth century B.C.

He said early Vedic literature referred to a number of rulers belonging to the Bharata—Puru-Kuru line who were known to be ancestors and predecessors of Parikshit of Mahabharata. These rulers were Pururavas, Aila, Ayu, Yayati, Nahushya, Samvarna, Pratipa, Aristasena, Santanu, Vichitravirya and Dhritarashtra. Of these, Vichitravirya and Dhritarashtra could be relevant in ascertaining the date of the Mahabharata war.

Dr. Phadke said Santanu mentioned in the last portion of the Rig Veda, was in all probability the great grandfather of the Kauravas and Pandavas. The abdication of Santanu's brother Devapi was well known to the Puranic tradition. It had been suggested by Pargiter that Devapi and Santanu were wrongly mentioned as sons of Pratipa, who was their
grandfather. Their father, Aristasena, had probably died earlier and so was omitted in the Puranic genealogy.

It may thus be possible, Dr. Phadke said, that the battle was fought after the composition of the Rig Veda. This, according to some scholars, was the reason why the battle was not mentioned in Vedic texts.

He said there was also a reference to Vichitravirya and Dhritarashtra in the Kathaka Samhita of the Yajurveda. Thus this Dhritarashtra could be none other than the grandson of Santanu. If the last portion of the Rig Veda was composed some time before 1000 B.C. and from this point we start counting the reigns of Santanu, Vichitravirya, the regency of Bhishma and then the long rule of Dhritarashtra, it might be possible to arrive at the date of the war in the second half of the ninth century B.C. Incidentally, this came close to the date 950 B.C. of Pargiter on the basis of Puranic chronology and 980 or 930 B.C. of Mr. B. B. Lal on archaeological grounds.

**Explorations Near Kurukshetra**

*From a Correspondent*

Chandigarh, Oct. 28—Explorations in the vicinity of Kurukshetra have been in progress, under the direction of Dr. U. V. Singh, Head of the department of Archaeology, Kurukshetra University, for some time now with a view to ascertaining the archaeological potentialities of several mounds, according to a university spokesman.

The sites explored include Sakhaji ka Tila. Dudakheri, Panditon ka Tila, Bari, Jorna Khera and Narakatari. The mound of Sakhaji ka Tila seems to contain the remains of a temple complex of the Gurjra-Pratihara period. The mound of Dudakheri has yielded pottery of the late phase of harappan culture and also the well-known painted greyware ascribable to first quarter of the first millennium B.C.
Annexure G

The Statesman—3rd November, 1975

Seminar on Mahabharata and Ramayana Proposed

Varanasi, Nov. 2.—Banaras Hindu University has proposed to the University Grants Commission that an all-India seminar be organized on the controversy over the Mahabharata and the Ramayana, reports PTI.

Dr. Gopal, who was the president of the Ancient India section of the Indian History Congress last year, said: “we are requesting the UGC to provide necessary funds for the seminar. The problem is a complicated one with diverse aspects which cannot be solved through Press statements. Newspapers are not the forum for settling such complicated issues”.

Asked about his views on the subject, Dr. Gopal said: “The totality of the available evidence makes a reasonable case for the historicity of the Mahabharata war. Some characters of the epic and a few details of its narrative find general credence from the later Vedic literature, including the Brahmins and Upanishads, early grammatical works of Panini and Patanjali, the fragments of Indica written by Megasthenes and Jain traditions”.

Much of the scepticism, he said, sprang from the apparent absence of archaeological evidence. But, as professor B. B. Lal had observed, excavations at Hastinapur and Kaushambi confirmed the Mahabharata account of the cities.

“No doubt the archaeological evidence has its own merit, its own objectivity. But, unless we are sure that we have dug at the right spot, we cannot over-emphasize the negative argument of absence of archaeological matter. Archaeology depends on the chance survival of evidence and for certain cultural details it cannot be expected to provide positive and concrete confirmation.

As for the date of the Mahabharata war, Dr. Gopal said that all possible indications must be carefully worked out. The conflict among the ‘traditional’ dates was advanced to challenge
the historicity of the event but the conclusion did not necessarily follow from the argument. Similar conflicting traditions existed about other historical events, for example Buddha's Parinirvana, but that could not demolish the historicity of these events, he added.

Annexure H

Kurukshetra War Dated At 3137 B.C.

By a Staff Reporter

Mr. A. N. Chandra said in Calcutta on Thursday that recent archaeological findings has proved that the Kurukshetra war was a historical event. What remained to be done now was to fix the date. He was in favour of 3137 B.C.

Mr. Chandra's paper on "The date of the Mahabharata War" has been accepted by the Indian History Congress which is scheduled to meet at Aligarh for three days from December 29. Speaking at a meeting organized by the Indo-German Association, he said that the period between 1200 B.C. and 1400 B.C. was generally favoured by Puranic scholars, but 3137 B.C. was the traditional date.

The astronomers, Aryabhatta and Bhaskara, and the "Aihole Inscription" favoured the traditional date. Kalhana, the historian of Kashmir, dated the war 653 years later. A verse of Vriddha Garga quoted by Varahamihir pointed to around 3137 B.C.

Mr. Chandra contended that a date close to 3137 B.C. could be computed from the astronomical references in the Mahabharata, particularly, Vyasa's advice to Dhritarashtra on the Kartika full moon night, Krishna's conversation with Karna, the full moon on the day of the war, the solar eclipse on the second day after Karna's talk with Kṛṣṇa and the death of Bhismma on the winter solstice after lying on the arrowbed for 58 nights from the 10th day of the war. A verse found in the
Sahakti Sangama Tantra and accounts of Megasthenes quoted by Pliny, Arrian and others practically favoured this period. Mr. Chandra concluded that if this date was accepted by historians, after further investigation, the date of the Aryan "invasion or migration" around 1500 B.C. would need "drastic revision".

*The Hindustan Times—13th December, 1975*

'Mahabharata war waged in 3137 BC'

Calcutta, Dec. 12 (UNI)—Recent archaeological findings support the view that the Mahabharata war is a historical event.

Historian A. N. Chandra, in a paper read at a seminar on the 'date of the Mahabharata war', organised by the Indo-German Association here, maintained that the war took place in 3137 B.C. although the period between 1200 B.C. and 1400 B.C. was generally favoured by puranic scholars.

He quoted several astronomers—Aryabhatata and Bhaskara—and the Aihole inscription in support of his arguments.

A verse in 'Vriddha Garga' quoted by Varahmaihiara, also set the event around 3137.

Mr. Chandra, who proposes to present his paper at the Indian History Congress at Aligarh from Dec. 29, said a date close to 3137 B.C. could be computed from the astronomical references in the Mahabharata.

A verse in the 'Shakti Sangama Tantra' and the accounts of Megasthenes quoted by Pliny and others also supported this date.

However, if this date was accepted, the date of the Aryan invasion or immigration, which was now thought to be around 1500 B.C. "would need to be drastically revised".