CHAPTER - 5

THE PALAEOGRAPHY OF ORISSAN INSCRIPTIONS IN THE 15TH - 16TH CENTURIES A.D.
The Suryavarnæi Gajapatis the successors of the Imperial Gaṅga dynasty ruled from A.D. 1435 to A.D. 1568 for about a hundred years in Orissa. Their empire include part of west Bengal as well as a large part of southern India. The copper plates and lithic records produced by them have been found not only in Orissa but also in Bengal and different districts of Andhra Pradesh and Tamilnadu. As a result of which the letters are influenced both by the southern characters and as well as Bengali. So a mixture of Nāgarī, Telugu, Bengali and Oriya characters are developed and finally the letters assumed the roundish shape. The various vowels and consonants used in their records and their characteristics are given below:

A: In the 15th-16th centuries A.D., epigraphic records of Orissa a has been presented in a number of forms. In the first of its kind, it is noticed in the inscription no. 2 on the right side of the Jaya Vijaya doorway in the temple of Jagannatha at Puri. Here the letter consists of a curve line opening towards the left or upwards and a vertical line into the right along with a central limb which joins the curve at its upper end and the vertical line at its lower end (Plate No. SLVI, Serial No. 1). This variety is closely resembled with α used in the inscription on the south wall of the Maṇḍapa infront of the Alvar shrine Lakshmi Narasimhaśvāmin temple, Simhachalam (Plate No. XLVI, Serial No. 2). The early Oriya form has been presented in the inscription no. 5 on the right side of the Jaya vijaya doorway in the temple of Jagannath at puri. The letter slightly changed in the inscription on the 47th pillar in the Tiruchuṭṭu Maṇḍapa of the Kurmesvara temple at Srikur̥mam while

1. JASB., Vol. LXII (1893)
2. SIL, Vol. VI, No. 1151
   AR No. 363, Vol. VII of 1899
4. AR. No. 362 of 1896.
a tail is added in the axe-head copper plate grant of Puruṣottamadeva of about the 15th century A.D. Here the letter partly looks like the early Oriya $g$ with the addition of a tail on the lower end of the right vertical line (Plate No. XLVII, Serial No. 1) Another variety is formed where the curve line opening towards left is bipartite in form which looks like the Roman numeral 3 as found in the inscription no. 4 on the left side of the Jaya Vijaya doorway in the temple of Jagannath at puri. Its later development is seen in the inscription on the round pillar in front of the Alvar shrine, Lakshmi Narasimha temple, Simhachalam (Plate No. XLVI, Serial No. 2). The letter is formed with two curves at the top both opening downwards which is commonly used in the modern Oriya alphabet (Plate No. XLVII, Serial No. 3).

Â: In the early Oriya epigraphs $a$ is formed exactly as in the Nāgarī and proto-Bengali forms. The form of $a$ is distinguished from that of $a$ by adding of a vertical line to the right as parallel to the vertical of $a$. The added right vertical line is joined to the right top corner of $a$ by a short slanting stroke as seen in the inscription on the 10th pillar on the Tiruchuṭṭu Maṇḍapa Kūṛmeśvara temple at Srikurumam (Plate No. XLV, Serial No. 3). In its later phase the right vertical line being separated from the vertical line of $a$. It has been seen in the Oriya text of the tri-lingual copper plate grant of Kapileśvaradeva (Plate No. XLVI, Serial No. 3) and in the inscription

5. IA., Vol. 1, 1872, p. 355 f
   JBORS., Vol. IV, 1918, part - IV, p. 361 f
6. SII. Vol. VI, No. 1152
   AR No. 363 Vol. VIII of 1899
7. AR. No. 295 of 1896.
8. JBHS., Vol. VI, pp. 94-111 ff
9. SII., Vol. VI, No. 748
   AR No. 266 of 1899.
on the 8th round pillar in the verandah round the central shrine of the Narasimha temple, Simhachalam of the 16th century A.D. (Plate No. XLVII, Serial no. 2). This variety became a common feature in the present Oriya alphabet (Plate No. XLVII, Serial No. 3).

I: In the early Oriya epigraphs as represented in the records of the Gajapatis initial \( i \) is composed in the flattened manner of Arabic numeral 8 with the addition of a curve line from the left loop which is noticed on the top and a short slanting downward tick is added on the right loop. This formula is used in the inscription on the south wall of the Manḍapa in front of the Alvar shrine Lakshmī Narasimha temple, Simhachalam (Plate No. XLVI, Serial No. 2) and inscription no. 2 on the right side of the Jaya vijaya doorway in the temple of Jagannath at Puri (Plate No. XLVI, Serial No. 1). In its later phase the upper notched of \( i \) became roundish which shows that it developed out from the earlier method as seen in the Oriya text of the tri-lingual copper plate grant of Kapileśvaradeva (Plate No. XLVI, Serial No. 3). This formula is probably borrowed from the inscription on the right side of the Southern entrance into the Astana manḍapa of the Mukhaliṅgeśvara Temple at Mukhaliṅgam of Southern India (Plate No. XLV, Serial No. 2). In the later period of Orissan Palaeography it became the common feature and that became applied for the present Oriya alphabet (Plate No. XLVII, Serial No. 3)

\( ĩ \): In the 15th-16th centuries A.D., the long (dirgha) \( ĩ \) is very rarely found as seen in the inscription on the 10th pillar in the Tiruchuṭṭu

10. SII, Vol. V, No. 1132
12. AR No. 247 of 1896
   SII, Vol. V, No. 1119
13. SII, Vol. V, No. 1132
Mandapa Kurmeśvara temple at Simachalam in line seven on the word bhăi. Here the letter is formed by putting of a short wave line on the top of the horizontal stroke of the Nāgarī i (Plate No. XLV, Serial No. 3). In the early Oriya inscriptions it is identified with modern Oriya i. The only difference found between these symbols of i and ā lies on the loop or notch in the upper curve of i and the tail being common to both of them (Plate No. XLVII, Serial No. 3).

U: From the study of Gajapati records of Orissa a number of three different varieties of initial u are noticed. Here one shows its later development. In the first of its kind u is of a curve line opening towards the left which hangs down from the horizontal top stroke by means of a short vertical line as seen in the inscription on the 10th pillar in the Tiruchuṭṭu Maṇḍapa kurmeśvara temple as Srikurumam, 15th century A.D. In the next phase of its development the horizontal top stroke became roundish and the added short vertical stroke of the earlier style changed into a slanting bar. In this formula a short tail is added on the right part of the leftward curve line. It is represented in a number of inscriptions such as in the inscription no. 2 on the right side of the Jaya Vijaya doorway in the temple of Jagannatha at puri (Plate No. XLVI, Serial No. 1) the axe-head copper plate grant of Puruṣottamadeva (Plate No. XLVII and Serial no. 2) and also in the inscription on the 8th round pillar in the verandah round the central shrine of the Narasimhaśāvāmin temple Simachalan (Plate No. XLVII, Serial No. 2). Its later kind is marked in the inscription on the south wall of the Maṇḍapa in front of the Alvar shrine, Lakshmi Narasimha temple, Simhachalam (Plate No. XLVI, Serial No. 2) where the slanting bar or angular form of the slanting line became roundish on the whole with the lower curve line. The Oriya form is seen in the Oriya text of the tri-lingual copper plate grant of Kapileśvaradeva where the letter is somewhat different from its earlier form. In this case the added short vertical on
its lower end became upward and again a down slanting bar is added on the end of the upper curve line on the right which shows it later development in to Oriya form (Plate No. XLVII, Serial No. 3).

$U$: In the early Oriya inscriptions of the Gajapati ruling families long $u$ is not available. It has occurred in the present Oriya alphabet (Plate No. XLVII, Serial No. 3). In the modern Oriya script, the length of the vowel is indicated by an inward loop or bend which was made in the upper curve of $u$ and above the points of its junction a tail is added.

$E$: $e$ consists of a horizontal line forming the base with a vertical at its right extremity standing perpendicularly and have a small inward curve on the top of the vertical. It has been represented in the axe-head copper plate grant of Puruṣottamadeva (Plate No. XLVII, Serial No. 1) and in the inscription on the 8th round pillar in the Verandah round the central shrine of the Narasimhaśvāmin temple, Simhachala (Plate no. XLVII, Serial No. 2). The horizontal line became upward in the early Oriya alphabet.

$AI$: It is conspicuous by its absence in the early Oriya inscriptions where as it is present in the proto-Bengali alphabet.

$O$: In the epigraphic records of the Gajapati ruling families of Orissa $o$ resembles with the Roman numeral 3 having these two curves opening towards left. Such variety is found in the inscription on the 8th round pillar in the verandah round the central shrine of the Narasimhaśvāmin temple, Simhachalam (Plate No. XLVII, Serial No. 2) and on a slab to the right of the second entrance into the Mukhaliṅgeśvara temple, mukhaliṅgam (Plate No. Serial no ) The upper curve of $o$ is curled inwards in the inscription no. 2 on the right side of the Jaya vijaya door way in the Jagannatha temple, puri (Plate No. XLVI, Serial No. 1). In its later development the
lower curve line is extended upwards as found in the present Oriya alphabet (Plate No. XLVII, Serial No. 3)

**AU:** The proto-Bengali variety of *au* is practically used in the mediaeval Orissan inscriptions like that of the modern Oriya, Bengali and Maithali alphabet.

**K:** The *Nāgarī* form of *k* is also found in the 15th century A.D. inscription as seen in the inscription on the 10th Pillar in the Tiruchuṭṭu Maṇḍapa kurmeśvara temple at Srikurumam. In its later variation the early Oriya form came into prominence where the letter consists of a vertical line forming a loop on the left and a downward on the right which was almost same in the *Nāgarī* form. The only difference is that a rightward curve line is added on the top of the left loop as seen in the inscription no. 2 on the right side of the Jaya vijaya doorway in the temple of Jagannath at Puri, 2nd quarter of the 15th century A.D. and inscription on the south wall of the Maṇḍapa in front of the Alvar shrine, Lakshmī Narasimha temple, Simhachalam (Plate No. XLVI, Serial No. 2). In its later variation the right curve of the letter is transformed into a loop which is known as double looped form. This variety is noticed in the inscription no. 2 on the right side of the Jaya Vijaya doorway in the temple of Jagannath at Puri (Plate No. XLVI, Serial No. 1) which looks like present Oriya initial *i* with the absence of a tail on its right end. Although this principle is adopted in the inscription on the 8th round pillar in the verandah round the central shrine of Narasimha haśvāmin temple Simhachalam of the 16th century A.D. (Plate No. XLVII, Serial No. 2) but a vertical line is present in between the two loops. These two varieties are present in the Oriya grant of Kapileśvaradeva but the loops are triangular in form. The present Oriya form is noticed in a number of Gajapati records such as the
axe-head copper plate grant of Puruṣottmadeva (Plate No. XLVII, Serial No. 1) third quarter of the 15th century A.D.

**KH:** In the early Oriya inscriptions *kh* essentially show the roundish form. Here the triangular loop forming the right limb of the letter has been considerably modified into Oriya alphabet by a wide opening at the top and adding of a straight vertical line on the right.

**G:** The Nāgarī form of *g* is obtained in a number of proto-Oriya inscription as seen in the inscription on the 10th pillar in the Tiruchuṭṭu Maṇḍapa kurmeśvara temple at Srikurmam of the 15th century A.D. (Plate No. XLV, Serial No. 3). The proto Bengali form is also occurred in some other circumstances of the Gajapati inscriptions of the 15th-16th centuries A.D. In this case it begins with a downward curve line which is joined with the right vertical line and in some other cases the looped base is formed without showing any hollow in the joining curve. In the early Oriya epigraphs *g* is represented through the proto Bengali form which shows a mere rounded top. Some of the forms show a curve at the left instead of a loop while in later records the vertical line on the right usually protrudes over the top curve as exhibited in the inscription on the 8th round pillar in the verandah round the central shrine of the Narasimhaśvāmin temple, Simhachalan, 16th century A.D. (Plate No. XLVII, Serial No. 2) and also in the present Oriya script (Plate No. XLVII, Serial No. 3).

**GH:** A number of two different varieties of *gh* are obtained from the study of the Gajapati records of Orissa. In its first form it has double curved base and the left curve is slightly higher than its neighbour. The top of the letter became roundish which simply indicates the derivative of the proto-Bengali form. This variety has been represented in the inscription no 2 on the right side of the Jaya.
Vijaya doorway in the temple of Jagannatha at Puri (Plate No. XLVI, Serial No. 1) which is almost same with present Oriya form.

\[ \dot{N} \]: This letter is rarely used in the earlier Orissan inscriptions but it is found in the Oriya alphabet which is the derivative of the proto-Bengali form. The only difference is found between \( \dot{n} \) and \( \d \) is the dot or circular sign, mentioned above.

**CH:** Two different varieties of \( ch \) are noticed as from the study of Gajapati records of Orissa. In the first of its kind it is a quadrangular curve with terminal opening towards the left. This variety is adopted in the inscription on the South wall of the Maṇḍapa infront of the Alvar shrine Lakṣmi Narasimha temple, Simhachalam (Plate no. XLVI, Serial No. 2) where as the quadrangular curve with terminal opening towards the left became a perfect loop in the axe-head copper plate grant of Puruṣottamadeva (Plate No. XLVII, Serial No. 1). In the second variation it has a looped base of somewhat triangular shape as seen in the inscription on the 8th round pillar in the Verandah round the central shrine of the Lakṣmi Narasimha temple at Simhachalam (Plate No. XLIV, Serial No. 1) of the 14th -15th centuries A.D. In some other instances it has a complete looped base as seen in the tri-lingual copper plate grant of Kapileśvaradeva (Plate No. XLVI, Serial No. 3) which has survived in the present Oriya script (Plate No. XLVII, Serial No. 3).

**CHH:** \( chh \) is formed by the placement of two loops joined with each other below the letter \( ch \). The arrangement of two loops is somewhat looks like \( chh \) of the Peḍḍadugam copper plate of Šatrudamana (Plate no. X, Serial No.1). The upper part is in rounded in place of horizontal and vertical line of earlier records. The modern Oriya script of \( chh \) continues after the formation of such type in the 14th -15th centuries A.D.

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A number of different types of \( j \) are obtained from the study of Gajapati records of the 15th-16th centuries A.D. one of them is a derivative of the proto-Bengali form where the top horizontal has become a curve or rounded as seen in the inscription no. 2 on the right side of the Jaya Vijaya doorway in the temple of Jagannath (Plate No. XLVI, Serial No. 1) and in the axe-head copper plate grant of Purusottamadeva (Plate No. XLVII, Serial No. 1). Its later variety is survived in modern Oriya alphabet of Karanî \( j \) as available in the inscription of the 22nd round pillar of the Alvar shrine in the Lakshmi Narasimha temple, Simhachalam and Oriya text of the tri-lingual copper plate grant of Kapileśvaradeva (Plate No. XLVI, Serial No. 3). Here the central bar has developed into a loop and the upper and lower limbs of the letter became roundish. The proto-Bengali influence is apparent in the modern Oriya script with flattened top of the central curve line of the proto-Bengali alphabet.

The early Oriya \( jh \) is a derivative of the proto-Bengali forms. The second vertical bar of the letter has transformed itself into a curve which is opened upwards and joined with the top curve of the letter. The present Oriya form is found in line - 6 on the word \textit{majhira} of the inscription on the 3rd round pillar of the Lakshmi Narasimhaśvāmin temple, Simhachalam dated A.D. 1547.

In the early Oriya inscriptions, three basic forms of \( t \) are observed. In the first variety it has double curved opening towards right with the addition of a horizontal bar on the top. It has been seen in the inscription on the right side of the Jaya Vijaya doorway in the temple of Jagannatha at Puri (Plate No. XLVI, Serial No. 1) and the axe-head copper plate grant of Puṣottamadeva (Plate No. XLVII, Serial No. 1). The next phase of its development is marked in the

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15. SII., Vol. VI, No. 8700
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inscription on the 8th round pillar in the verandah round the central shrine of Lakshmi Narasimhasvamin temple, Simhachalmn (Plate No. XLVII, Serial No. 2). This form of \( \xi \) suggests that it is the previous form of looped base. In such case the lower part is curled inwards before forming a loop. In its later period the lower curve develops into a loop which has survived in modern Oriya alphabet with rounded top replacing the horizontal bar but retaining the vertical mark.

**TH:** In the cases of early Oriya inscriptions of the 15th-16th centuries A.D. \( \text{\textit{\textbf{\textit{th}}}} \) is simply of a perfect circle and the horizontal or vertical marks are detected.

**D:** In one of the 15th century A.D., Gajapati records such as in the inscription no. 2 on the right side of the Jaya Vijaya doorway in the temple of Jagannatha at Puri, a short slanting stroke hangs down from the top horizontal line ending into a curve opening towards the left (Plate No. XLV, Serial No. 3). In its later development the top horizontal stroke changed into roundish form while in the present Oriya alphabet the roundish top joins with the extremity of the lower left curve.

**DH:** The form of \( \text{\textit{\textbf{\textit{dh}}}} \) is rarely found in the epigraphic records of Orissa of about the 15th-16th centuries A.D. It offers the inward curve line like the Nāgarī form but the horizontal top line is replaced into roundish form. It is seen in the inscription no. IV on the left side of the Jaya Vijaya doorway in the temple of Jagannath at Puri in line-3 on the word \( \text{\textit{\textbf{\textit{dhormana}}} \; .} \) Similar formula is also used in the present Oriya alphabet.

**N:** The typical Nāgarī form is also exhibited in the 15th century A.D. epigraphic records of Orissa as particularly seen in the inscription on the 10th pillar in the Tiruchuṭṭu Manḍapa kurmeśvara temple
(Plate No. XLV, Serial No. 3). Here the letter consists of a horizontal bar with three verticals hanging down from it and the left vertical ending into a tail slanting towards right. In the early and modern Oriya forms it has nearly its proto-Bengali form where a loop is generally formed at junction of the two curves.

**T:** In the epigraphic records of the 15th century A.D., the modern Nāgarī form also present in the inscription on the 10th pillar in the Tiruchuṭṭu Mahāḍapa kurmeśvara temple at Srikurmam (Plate No. XLV, Serial No. 3). Here the letter consists of top horizontal line and from its right end a vertical line prolonged down with a curve opening downwards on the left of the vertical. The proto-Bengali form of the short vertical and horizontal of \( \text{t} \) transformed into rounded top in the early Oriya inscriptions. In the modern Oriya alphabet the top curve line became semi circle and that circle started from the left end of the lower curve line.

**TH:** The proto-Bengali form being adopted in the case of early Oriya \( \text{th} \) where the lower curve however has become more rounded. In some other instances the right vertical line is prolonged downwards as parallel to the base of the letter. It has been represented in the inscription no. 2 on the right side of the Jaya Vijaya doorway in the temple of Jagannath at Puri (Plate No. XLVI, Serial No. 1) and in the axe-head copper plate grant of Purushottamadeva (Plate No. XLVII, Serial No. 1). The upper leftward curve became a perfect loop in the present Oriya script (Plate no. XLVII, Serial No. 3).

**D:** A number of two different varieties of \( \text{d} \) are found from the study of the 15th-16th centuries A.D. Orissan inscriptions. In the first of its variety \( \text{d} \) consists of a curve line opening towards the right and that is hanged down from the top horizontal bar by a short slanting stroke and is endowed down along with the addition of a tail on it (Plate No. XLV, Serial No. 3). In the early Oriya epigraphs the
slanting stroke is suppressed and the slanting downward tail tends to be vertical. The horizontal top stroke becomes roundish and ultimately the modern Oriya $d$ is formed as we see today.

**DH:** The proto-Bengali form is applied for the composition of $dh$ in the Palaeography of the Gajapati records of Orissa. In this case the added downward slanting line crosses the right vertical line. It has some resemblance with the Karan alphabet. In the present Oriya script the left slanting line along with the left part of the letter being separated from the right vertical line.

**N:** As studied from the early Oriya inscriptions, a number of two different varieties of $n$ are found. In the first of its kind the upper part of the vertical line is retained. In the second variety the upper part of the vertical line and the top horizontal line are amalgamated into a single top curve as seen in the Oriya text of the tri-lingual copper plate grant of Kapilésvaradeva (Plate No. XLVI, Serial No. 3). In both these cases the left slanting stroke and the lower part of the vertical line became roundish as of the Oriya form.

**P:** The modern Nāgarī form of $p$ is found in some instances of the 14th-15th century Orissan inscriptions. In such case the lower end of the left is joined in the middle part of the right vertical line (Plate no. XLV, Serial No. 3) while in other cases it is joined with the bottom of the vertical line. Sometimes the proto-Bengali form occurs where the horizontal top stroke being transformed into small curve. Both primary and secondary forms are available in the early Oriya inscriptions. The primary form is identical with the proto-Bengali form while the secondary form is hardly distinguishable from the early Oriya $y$. In the case of early Oriya form it has double curve on the left and a vertical bar is joined with them on the top and bottom and that vertical line is prolonged downwards more as parallel to the base of $p$. 
**PH:** Ph is based on that of p. It is distinguished from p with the addition of a circular loop at the right top corner of p.

**B:** It is not found in the inscriptions of Orissa of about the 15th-16th centuries A.D.

**BH:** In the early Oriya inscriptions, a number of different varieties of bh occurred. The earlier top horizontal has become roundish and a tail is added to the bottom part as seen in the inscription on the South wall of the Mandapa infront of the Alvar shrine, Lakshmi Narasimha temple, Simhachalam (Plate no. XLVI, Serial No. 2) having suppression of the central base line. In the axe-head copper plate grant of Purusottamadeva of the third quarter of the 15th century A.D., bh is formed with a single curve line inside the letter which survived in the modern Oriya form. The completely roundish form of the modern Oriya script is available in the inscription on the 8th round pillar in the verandah round the central shrine of the Narasimhaśvamin temple, Simhachalam, 16th century A.D. (Plate No. XLVII, Serial No. 2).

**M:** In the 15-16th centuries A.D. the lower horizontal line of earlier form of m has been partially suppressed and the top of the letter became roundish. In this variety the lower part of the left slanting stroke is slightly curled inwards as seen in the inscription on the 26th niche in the verandah round the central shrine of the Lakshmi - Narasimhaśvamin temple at Simhachalam.

**Y:** In the 15th-16th centuries A.D y is the derivative of the Nāgarī and proto-Bengali form. The joint section of the lower curve line with the left extremity develops into a curl or short slanting stroke to the left. To distinguish the symbol of y from that of its derivative pronounced like j a tail is attached to the bottom of the letter or to the end of its vertical as seen in the axe-head copper plate grant of
Puruṣottamadeva (Plate no. XLVII, Serial No. 1). The exact type is seen in the inscription in the 24th round pillar in the verandah round the central shrine of the Lakshmī Narasiṁhaśvāmin temple, Simhachalam which partly looks like the present Oriya form.

R: We have to come across a number of varieties of r in the Gajapati epigraphic records of the 15th-16th centuries A.D. All these varieties are derived from the tailed r of the proto-Bengali form. In the first of its kind the angular curve of the proto-Bengali form does not touch the vertical line but it is bent towards left and often ends in an outward curl. Including these features the top horizontal line being replaced into a rounded curve. The triangular lower limb of the proto-Bengali r has assumed a circular form and it is endowed with the top curve in the inscription on the 8th round pillar in the verandah round the central shrine of the Narasiṁhaśvāmin temple, Simhachalam of the 16th century A.D. (Plate no. XLVII, Serial No. 2). In these types a tail is added on the bottom of the looped base. In its later development, the roundish variety is formed where the upper curve of the earlier form comes down to join the tail of the letter as seen in the Oriya text of the tri-lingual copper plate grant of Kapileśvaradeva (Plate no. XLVI, Serial No. 3). In some instances of the axe-head copper plate grant of Puruṣottamadeva r looks like ch but with a slanting downward right stroke that developed later on. Although this formula is adopted earlier but in the Oriya text of the tri-lingual copper plate grant of Kapileśvaradeva of the 15th century A.D. the developed Oriya form also came into prominence.

L: As studied from the Gajapati records of Orissa l consists of a curve line opening downwards which is joined by means of a similar curve to the middle part of the vertical to the right and that is hanged down from the top horizontal line. In some other cases the left curve line which is sometimes of a slightly lower level than its
neighbour has its outer extremity turning sharply downwards. In its later variation \( l \) is developed out from the proto-Bengali form where the top of the letter became roundish. In the present Oriya script a tail is added on the lower end of the upper curve on the right. That formula is now used in the modern Oriya alphabet.

\( V: \) In the records of the Gajapati kings of Orissa \( v \) is derived from the Nāgarī form where the top horizontal and a part of vertical line being transformed into roundish curve. That is also used in the present Oriya script (Plate No. XLVII, Serial No. 3).

\( S:\) In the early Oriya \( s \) is obtained in the inscriptions of Orissa belongs to the 15th-16th centuries A.D. It is formed with a loop base and the double curve line has joined on its top which is added by a straight vertical line on the right.

\( SH:\) It is almost same with \( p \) along with the addition of a slanting bar on its belly. The top horizontal takes up a round form with a vertical on the right as \( p \).

\( S:\) Two different varieties of \( s \) are exhibited in the Gajapati records of Orissa. One is the downward opening type where as the other is the closed type. The first variety is resembled with the Nāgarī \( s \) where it has flattened top and the base is opened one as seen in the inscription on the 10th pillar in the Tiruchuṭṭu Maṇḍapa kurmeśvara temple at Srikurram, 15th century A.D. (Plate No. XLV, Serial No. 3). The second type is derived from the Nāgarī \( s \) with roundish top and the central cross bar suppressed. Including these features the slanting stroke on the left becomes the base and closes its downward opening used in the present Oriya script (Phase no. XLVII, Serial No. 3). The peculiarity is found in the inscription no. 1 on the right side of the Jaya Vijaya doorway in the temple of Jagannath at Puri.
in the 2nd Anka of Puruṣottmadeva where a smaller loop appears at the left bottom.

**H:** The Nāgarī form of \( h \) is obtained in the rare instances of the Gajapati records. In the early Oriya form as exhibited in the inscription No. 2 on the right side of the Jaya Vijaya door way in the (Plate No. XLVI, Serial No.1) temple of Jagannath at puri and the inscription on the south wall of the Mandapa infront of the Alvar shrine, Lakshmi Narasimhaśvāmin temple, Simachalam (Plate No.XLVI, Serial No. 2) the top horizontal line became roundish with a tail attached to the bottom. Its later development is marked in the axe-head copper plate grant of Puruṣottamadeva (Plate No. XLVII, Serial No. 1) and inscription on the 8th round pillar in the verandah round the central shrine of the Narasimhaśvāmin temple, Simhachalam where a slanting rightward stroke is attached on the bottom of the short slanting bar of the earlier form. Though the letter is resembled with \( d \) but it has a tail which distinguishes it from the letter. The later variety is also used in the present Oriya script (Plate no. XLVII, Serial No. 3).

The period under discussions marked a great change in the palaeography of Orissan inscriptions. The proto-Oriya (proto-Bengali of Bunler) has gradually transformed into the modern Oriya alphabet. The initial \( a, ā, i, u, e, ai, o, au, k, kh, ch, jh, t, n, t, bh, r \) and \( s \) are found in proto-Bengali form. The derivative of all these are found in early Oriya inscriptions as well as modern Oriya alphabets. Though Oriya alphabet is mainly affiliated to proto-Bengali however the influence of the Nāgarī is also noticed in the case of few letters such as \( a, ā, t, k, y, s \) and \( h \) which may be called the archaic or early or transitional Oriya script. However the Nāgarī

influence is confined only to a few letters of the Oriya alphabet. Therefore it is reasonable to think that the Oriya form have comedown through proto-Bengali but it bears the influences of the Nāgarī and in a few cases of the Southern alphabet.