SEGMENTAL PHONOLOGY OF MAITHILI URDU
(A LESSER KNOWN LANGUAGE SPOKEN IN THE NORTHERN DISTRICTS OF BIHAR)

M J Warsi
Department of Linguistics, Aligarh Muslim University, Aligarh (UP), India

ABSTRACT – This paper on the Mithilanchal Urdu, a dialect of the Indo-Aryan language family, would be an interesting study in the time of the Corona Pandemic, as it may be considered a minority language or dialect and such languages and dialects have been found to be especially vulnerable in the times of calamities like the present COVID-19 pandemic. However, this paper would basically provide a baseline upon which post-pandemic studies can be based for exploring the effect of the pandemic. The present study reflects the segmental phonology of Maithili Urdu, a dialect of the Indo-Aryan language family, spoken mainly in the Mithilanchal region of the state of Bihar in India. Maithili Urdu does not have its own script or literature, yet it has maintained an oral history over many centuries. It has contributed in enriching the Maithili, Hindi and Urdu language and literature very profoundly. There are ten vowels in Maithili Urdu. It would be very interesting to know that out of these, there are four front vowels, four back vowels, and two central vowels. Lip rounding is not distinctive, but only the back vowels are rounded. Out of these ten vowels, three are short and seven are long. Length, thus, is a distinctive feature in Maithili Urdu, where short and long vowels show full phonological opposition in all positions. These are all pure vowels, non-nasalized. All vowels in Maithili Urdu can be nasalized. Consonantal phonemes in Maithili Urdu show four-way contrast between voiceless and voiced and unaspirated and aspirated at bilabial, dental, retroflex, palatal, velar, and glottal places of articulation. Phonetically, affricates also behave like stops. Similarly, the taps, laterals, and nasals also show a two-way contrast between unaspirated and aspirated. Aspiration, thus, is an overriding characteristic of the Maithili Urdu sound system. This study has greatly benefited from the similar work done by Dixit, 1963; Halle & Mohannan 1985; Masud Husain Khan, 1986; Hyman, 2003. In this paper, a brief overview of segmental phonology of Maithili Urdu will be presented wherein vowels and consonants and their phonotactic behavior will be described in detail.

Key words: Biolinguistic diversity, Language Acquisition, Language Transmission, Linguistics Domains.

I. INTRODUCTION

The present work is a grammatical description of Mithilanchal Urdu, a dialect of the Indo-Aryan language family, spoken by around twenty percent speakers mainly in the Mithilanchal region of the state of Bihar in India. Besides, it is also spoken by a majority of the Mithilanchal diaspora community. Very rich in literary style, Mithilanchal Urdu has maintained a literary history over many decades. It has contributed in enriching the Hindi and Urdu language and literature very profoundly.

II. Geography

Mithilanchal is the historic name for the large area of Bihar that includes roughly present day Rajsamand, Bhilwara, Udaipur, and Chittaurgarh districts of Rajasthan state of India. Mithilanchal region lies across the Aravalli mountain range to the northwest; Ajmer lies to the north; Wagar region of Rajasthan and Gujarart lies to the south; Malwa region of Madhya Pradesh state lies to the southeast; and the Harauti region of Rajasthan lies to the east. The northern part of Mithilanchal is a gently sloping plain, drained by the Banas river and its tributaries, which empty northwest into the Chambal river, a tributary of the Yamuna river. The southern part of the region is hilly and marks the divide between the Banas and its tributaries and the headwaters of the Sabarmati and Mahi rivers and their tributaries, which drain south into the Gulf of Cambay through Gujarat state.

Mithilanchal has a tropical climate. Rainfall averages 660 millimeter per annumand is generally higher in the southwest and lower in the northeast of the region. Over ninety percent of the rain typically falls between June to September every year, during the southwest monsoon. The region is part of the Kathiawar-Gir dry deciduous forests’ eco-region. Protected areas include the Jaisamand Wildlife Sanctuary, the
Kumbhalgarh Wildlife Sanctuary, the Bassi Wildlife Sanctuary and the Sitamata Game Sanctuary.

III. Sociolinguistic data

The term “Mithilanchal Urdu” literally refers to someone who hails from or is an inhabitant of the Mithilanchal region in Rajasthan. Mithilanchal Urdu people prefer to speak Mithilanchal Urdu dialect of Rajasthani, but nowadays Hindi is gradually replacing Rajasthani as it is the medium of instruction at all levels. Moreover, one will find English speakers in all the major cities and in remote villages too. Hinduism is the main religion of Mithilanchal region and other significant religious groups in this area are the Jains and the Muslims. There are many local folk heroes and local deities.

IV. Existing research

Though Mithilanchal Urdu had contributed profoundly to Rajasthani literature in medieval periods, however extensive linguistic research work has not been conducted on it. Some native scholars have done research on its word lists and there is scanty work on phonology. However, the work done by Yadav 2011; Ohala Manjari, 1991; Chomsky and Halle, 1968 are of great importance. In addition, sketches of its morphology and syntax are found in some texts and monographs.

V. Vowels

There are ten vowels in Mithilanchal Urdu. Out of these, the high vowels /i, e, æ/ are four front vowels, four back vowels, and two central vowels (see Table 1). Lip rounding is not distinctive, but only the back vowels are rounded. Out of these ten vowels, three are short and seven are long. Length, thus, is a distinctive feature in Mithilanchal Urdu, where short and long vowels show full phonological opposition in all positions.

| Vowels      | Front | Central | Back |
|-------------|-------|---------|------|
| High        | i     |         | u    |
| Low-High    | i     | œ       | o    |
| Mid         | e     | œ       | o    |
| Low         | æ     | a       | œ    |

These are all pure vowels, non-nasalized. All vowels in Mithilanchal Urdu can be nasalized. To each vowel, there corresponds a nasalized counterpart (see 1.1.9).

1. Front vowels

The phonological contrast between the front vowels /i, e, æ/ is shown below at all levels:

| Initial       | Medial       | Final     |
|---------------|--------------|-----------|
| iman ‘faith’  | tʰiːk        | sarkari ‘official’ |
| islam ‘Islam’ | bɔːm        | ‘sister’ ruːt ‘interest’ |
| ek ‘one’      | gen ‘ball’   | ke ‘who’ |
| aeb ‘defect’  | pəɾ ‘foot’   | ha ‘is’ |

2. Central vowels

The central vowels /a, ə/ show full phonological contrast at all levels:

| Initial         | Medial         | Final         |
|-----------------|----------------|---------------|
| a ə ‘now’       | aːn ‘peace’    | mən ‘mind’    |
| alu ‘potato’    | kitab ‘book’   | dana ‘grain’  |
| akʰbar ‘newspaper’ | kəm ‘less’  | rəhəma ‘mercy’ |
| ap ‘you’        | məkən ‘building’ | məhna’month’ |

3. Back vowels

The back vowels /u, o, ɔ/ are rounded and show phonological opposition in all positions:

| Initial  | Medial | Final   |
|----------|--------|---------|
| un ‘wool’ | kəsɔːr | ‘fault’ jɔːru ‘broom’ |
| ostad ‘teacher’ | kus | ‘grass’ s ur u ‘beginning’ |
| okra ‘his/her’ | jɔr | ‘force’ koro ‘bamboo’ |
| ɔs ‘dew’ | Foj | ‘army’ so ‘hundred’ |

4. High vowels

The high vowels /i, u/ contrast in all positions:

| Initial  | Medial | Final   |
|----------|--------|---------|
| inam ‘reward’ | tʰik | ‘correct’ moʃi ‘cobbler’ |
| upar ‘above’ | kʰun | ‘blood’ babu ‘clerk’ |
| id ‘Eid’ | məʃin | ‘fine’ biʃli ‘electricity’ |
| udʰar ‘loan’ | nak’un | ‘nail’ lahu ‘blood’ |
5. Low-high vowels
The low-high vowels /l, ʊ/ contrast at all positions, but occur rarely at word-final position:

| Initial | Medial | Final   |
|---------|--------|---------|
| ɪ `this` | ɨ `what` | ɾʊ ɾ `interest` |
| iṣlam `Islam` | iṣtiri `mechanic` | ɾiṣi `hermit` |
| ʊd̪əɾ `that side` | ʊbhoṭ `much` | ɾoɾo `beginning` |
| ʊllu `owl` | ɾupya `rupee` | ɾoṣo `animal` |

6. Mid vowels
The mid vowels /e, ə, o/ show phonological contrast in all positions:

| Initial | Medial | Final   |
|---------|--------|---------|
| ɛk `one` | ɛɪ `table` | ɾoɾem `rooms` |
| əb `now` | əm `less` | ɾoɾo `mind` |
| okra `his/her` | ɾoɾo `peacock` | ɾo `two` |

7. Low vowels
The low vowels /æ, a, ɔ/ show phonological contrasts at all positions:

| Initial | Medial | Final   |
|---------|--------|---------|
| ɒb `defect` | ɒsə `dignity` | ɾoɾ `twisting` |
| əs `hope` | ɾbəi `brother` | ɾorra `father` |
| əɾ `and` | ɾo `who` | ɾoɾ `hundred` |

B. Vowel length
There are three pairs of short and long vowels in Mithilanchal Urdu: /ə/ and /ɪ/, /ʊ/ and /ɨ/, and /o/ and /oː/. They show full phonological contrast at all—initial, medial, and final—positions, but short vowels generally occur at less frequently at final position. The following words illustrate the length contrast between short and long vowels at initial and medial positions:

1. Initial
Short vowel Long vowel

| Initial | Medial | Final   |
|---------|--------|---------|
| ɪ `this` | ɾoɾ `faith` | ɾoɾ `rupee` |
| ʊllu `owl` | ɾo `wool` | ɾo `potato` |
| əb `now` | ɾo `potato` |
2. **Medial**

| Oral  | Nasalized |
|-------|------------|
| čita  | ‘tiger’    | čiti  | ‘ant’    |
| čištì | ‘sage’     | čigarì | ‘spark’ |
| peṭ  | ‘stomach’  | pēṭr  | ‘painter’ |
| Pasa  | ‘money’    | pāda  | ‘bottom’ |
| bas  | ‘bus’      | bād   | ‘closed’ |
| čadar | ‘shawl’   | čōd   | ‘moon’   |
| dur  | ‘far’      | pahūčna | ‘to reach’ |
| khos | ‘happy’    | khōkhar | ‘blood thirsty’ |
| mor | ‘peacock’  | ghōču | ‘stupid’ |
| mosəm | ‘weather’ | bhōh | ‘eyebrow’ |

3. **Final**

| Oral  | Nasalized |
|-------|------------|
| ḏshi | ‘yogurt’  | nōshī  | ‘not’ |
| ruči | ‘interest’ | jāmā   | ‘land’ |
| kamrā | ‘rooms’  | katabē | ‘books’ |
| mē  | ‘alcohol’ | məh | ‘I’ |
| bōda | ‘bad’   | bōdā   | ‘body’ |
| kōha | ‘said’  | kōhā   | ‘where’ |
| lōhū | ‘blood’  | gehū   | ‘wheat’ |
| bōho | ‘wife’  | kōhō   | ‘blood’ |
| do  | ‘two’   | donō   | ‘both’ |
| lə | ‘flame’ | bōhū | ‘eyebrow’ |

**VI. Consonants**

There are three notions that help distinguish one sound from another in describing the consonant sounds of Mithilanchal Urdu. They are:

(i) place of articulation
(ii) manner of articulation, and 
(iii) voicing.

Mithilanchal Urdu consonantal phonemes are described in terms of the following articulatory features: (i) Labial position (ii) Dental position (iii) Palatal position (iv) Velar position (v) Glottal position (vi) Closure (vii) Trill (viii) Frictionless aperture (ix) Lateral opening (x) Retroflexion (xi) Nasality (xii) Voicing, and (xiii) Aspiration. The consonantal phonemes are seen in Table 2.

**Table 2: Consonants in Mithilanchal Urdu**

| Bilabial | Dental | Retroflex | Palatal | Velar | Glottal |
|----------|--------|-----------|---------|-------|---------|
| Stops    |        |           |         |       |         |
| Voiceless unaspirated | p | t | Ă | ċ | k |
| Voiceless aspirated     | p̩ | t̩ | T̩ | ċ̩ | k̩ |
| Voiced unaspirated      | b | d | ɗ | j | g |
| Voiced aspirated        | b̩ | d̩ | ɗ̩ | j̩ | g̩ |
| Nasals               | m | n | [ŋ] | [ŋ] | [ŋ] |
| Fricatives         |        |           |         |       |         |
| Voiceless |        |           |         |       |         |
| Voiced         |        |           |         |       |         |
| Laterals        | l            |           |         |       |         |
| Trill           | r            |           |         |       |         |
| Frictionless continuants | w |        |         |       |         |

**A. Description of individual consonantal phonemes with allophonic variations**

There are 28 consonantal phonemes in Mithilanchal Urdu that show four-way contrast between voiceless vs. voiced and unaspirated vs. aspirated at bilabial, dental, retroflex, palatal, velar, and glottal places of articulation. Aspiration is an overriding characteristic of the Mithilanchal Urdu sound system. Description of each consonant phoneme is given below:
1. **Stops**

### /p/ voiceless unaspirated bilabial stop are not fully released in the final position:

| Initial | Medial | Final |
|---------|--------|-------|
| pəhla  | ‘first’| upər  | ‘above’| səp  | ‘snake’|
| pas     | ‘near’ | məsəkən | ‘building’ | pəp | ‘sin’|

### /pʰ/ voiceless aspirated bilabial stop are not fully released in the final position:

| Initial | Medial |
|---------|--------|
| pʰəkər | ‘beggar’|
| pʰəltə | ‘useless’|

### /b/ voiced unaspirated bilabial stop are fully released in all positions:

| Initial | Medial |
|---------|--------|
| bəstər  | ‘bedding’|
| bənə | ‘without’|

### /bʰ/ voiced aspirated bilabial stop does not occur fully aspirated in the final position:

| Initial | Medial |
|---------|--------|
| bʰəi  | ‘brother’|
| bʰə  | ‘sheep’|

### /l/ voiceless unaspirated dental stop:

| Initial | Medial |
|---------|--------|
| təngə  | ‘cart’|
| tərkər | ‘vegetable’|

### /lʰ/ voiced aspirated retroflex stop occurs less aspirated in the final position:

| Initial | Medial |
|---------|--------|
| dʰələ | ‘loose’|
| dʰəkkən’ləd  | ‘carpenter’|

### /d/ voiced unaspirated stop:

| Initial | Medial | Final |
|---------|--------|-------|
| din     | ‘day’ | kodət | ‘nature’|
| do      | ‘two’ | bədən | ‘body’|

### /dʰ/ voiced aspirated dental stop is less aspirated in the final position:

| Initial | Medial | Final |
|---------|--------|-------|
| dʰərəmə | ‘picketing’| čədʰəri | ‘headman’|
| dʰəkə | ‘betrayal’| dʰəera | ‘darkness’|

### /h/ voiceless unaspirated retroflex stop:

| Initial | Medial | Final |
|---------|--------|-------|
| həsəb | ‘calculation’| həsəb | ‘bone’|

### /gʰ/ voiced unaspirated retroflex stop:

| Initial | Medial | Final |
|---------|--------|-------|
| tʰək | ‘right’| tʰək | ‘eight’|
| tʰə  | ‘solid’| Kətʰnai | ‘difficulty’|

### /gʰ/ voiced unaspirated retroflex stop:

| Initial | Medial | Final |
|---------|--------|-------|
| dʰə | ‘hug’| dʰə | ‘grip’|

| Initial | Medial | Final |
|---------|--------|-------|
| dʰənə | ‘house’| dʰənə | ‘affection’|
| dʰə | ‘stick’| dʰə | ‘leader’|

### /hʰ/ voiced unaspirated dental stop occurs less aspirated in final position:

| Initial | Medial | Final |
|---------|--------|-------|
| tʰəli | ‘plate’| tʰəli | ‘stone’|
| tʰəppər | ‘slap’| tʰəppər | ‘nose ring’|

### /gʰ/ voiced aspirated dental stop occurs less aspirated in final position:

| Initial | Medial | Final |
|---------|--------|-------|
| dʰəla | ‘loose’| dʰəla | ‘study’|
| dʰəkəkən’li | ‘carpenter’|

### /gʰ/ voiced aspirated dental stop occurs less aspirated in final position:

| Initial | Medial | Final |
|---------|--------|-------|
| hətʰ | ‘hand’| hətʰ | ‘hand’|
| sətʰ | ‘together’| sətʰ | ‘together’|
// voiceless unaspirated palatal stop:

| Initial | Medial | Final |
|---------|--------|-------|
| ċar     | ‘four’ | počas | ‘fifty’ | kanč | ‘glass’ |
| čawal   | ‘rice’ | lačok | ‘flexibility’ | sāč | ‘true’ |

// voiceless aspirated palatal stop:

| Initial | Medial | Final |
|---------|--------|-------|
| čʰata   | ‘umbrella’ | mačʰali | ‘fish’ | gačʰ | ‘tree’ |
| čʰati   | ‘chest’ | kačʰova | ‘tortoise’ | Kōčʰ | ‘some’ |

// voiced unaspirated palatal stop:

| Initial | Medial | Final |
|---------|--------|-------|
| j̱al    | ‘net’ | gačar | ‘carrot’ | raj | ‘regime’ |
| jadu    | ‘magic’ | kʰočli | ‘itching’ | aj | ‘today’ |

// voiced aspirated palatal stop occurs less aspirated in middle and final positions:

| Initial | Medial | Final |
|---------|--------|-------|
| j̱ula   | ‘bag’ | manʃʰi | ‘boatman’ | sōmʃʰ | ‘understanding’ |
| j̱aru   | ‘broom’ | sōmʃʰdar | ‘wise’ | bojʰ | ‘load’ |

// voiceless unaspirated velar stop:

| Initial | Medial | Final |
|---------|--------|-------|
| kʰab   | ‘when’ | nokar | ‘servant’ |
| kam     | ‘work’ | ṭokri | ‘basket’ |

// voiceless aspirated velar stop:

| Initial | Medial | Final |
|---------|--------|-------|
| kʰorab | ‘bad’ | likʰna | ‘to write’ | ākʰ | ‘eye’ |
| kʰana   | ‘food’ | rakʰwali | ‘vigil’ | rakʰ | ‘ash’ |

// voiced unaspirated velar stop occurs less aspirated in middle and final positions:

| Initial | Medial | Final |
|---------|--------|-------|
| gacar   | ‘carrot’ | maŋar | ‘if’ | ag | ‘fire’ |
| garib   | ‘poor’ | Ifgan | ‘tax’ | rog | ‘disease’ |

// voiced aspirated velar stop:

| Initial | Medial | Final |
|---------|--------|-------|
| gʰor   | ‘house’ | bągʰama | ‘seasoning’ | bagʰ | ‘tiger’ |
| gʰangʰor | ‘overwhelming’ | begʰar | ‘homeless’ | sığʰ | ‘lion’ |

B. Nasals

// voiced bilabial nasal:

| Initial | Medial | Final |
|---------|--------|-------|
| məgar   | ‘but’ | bmari | ‘desease’ | dam | ‘price’ |
| mela    | ‘fair’ | kəmra | ‘room’ | kəm | ‘work’ |

// voiced nasal. It has four allophones: [ŋ], [n̩], [n], and [ṉ]

[ŋ] velar nasal occurs only before velar stops:
| Initial | Medial | Final |
|---------|--------|-------|
| kəlɔŋk | ‘blemish’ | rəŋk | ‘colour’ |
| rəŋk    | ‘poor’ | ɗ̱əŋk | ‘manner’ |
| pəŋkʰ   | ‘eye’ | Kəŋkʰ | ‘comb’ |
| pəŋkʰ   | ‘feather’ | nəŋkʰ | ‘thigh’ |
| nəŋkʰ   | ‘nose’ | Jəŋkʰ | ‘nose’ |
| nəŋkʰ   | ‘salt’ | Səŋkʰ | ‘salt’ |

[ŋ] palatal nasal occurs only before palatal stops:
| Initial | Medial | Final |
|---------|--------|-------|
| pəŋc    | ‘five’ | gəŋja | ‘bald’ |
| kəŋc    | ‘glass’ | pəŋja | ‘claw’ |
| rəŋc    | ‘bear’ | maŋʃʰi | ‘boatman’ |
| rəŋc    | ‘moustache’ | baŋʃʰ | ‘barren’ |

[ŋ] retroflex nasal occurs only before retroflex stops:
| Initial | Medial | Final |
|---------|--------|-------|
| iŋt     | ‘brick’ | əŋda  | ‘egg’ |

www.irj.iars.info
www.research.iars.info/index.php/curie
b̌eŋṭ ‘meeting’ ťəndə ‘cold’
gənť ‘knot’ məndəɔk ‘frog’
Kənť ‘throat’ mʊnď ‘root’

[n] dental nasal occurs in all other environments:

| Initial | Medial | Final |
|---------|--------|-------|
| nak ‘nose’ | pənir ‘cheese’ dən ‘grain’ |  |
| nəṃk ‘salt’ | kənara ‘edge’ kan ‘ear’ |  |

C. Fricatives

/s/ a voiceless dental fricative occurs in all environments:

| Initial | Medial | Final |
|---------|--------|-------|
| sələm ‘greetings’ | kısan ‘farmer’ məls ‘massage’ |  |
| sət ‘seven’ | məsala ‘spice’ dəs ‘ten’ |  |

/h/ voiceless glottal fricative occurs in all environments. Though, it is always released initially, but medially and finally it is not fully released:

| Initial | Medial | Final |
|---------|--------|-------|
| həm ‘we’ | bahər ‘out’ rəh ‘soul’ |  |
| həjə ‘attendance’ | məshəl ‘palace’ bəh ‘arm’ |  |

D. Laterals

/ɻ/ voiced dental lateral occurs in all positions:

| Initial | Medial | Final |
|---------|--------|-------|
| Log ‘people’ | palak ‘spinach’ gal |  |
| ləl ‘red’ | halat ‘condition’ ɭul |  |

E. Trill

/r/ voiced dental alveolar trill occurs in all positions:

| Initial | Medial | Final |
|---------|--------|-------|
| rəs ‘juice’ | sərdi ‘cold’ dər ‘fear’ |  |
| rəja ‘king’ nəɾəm ‘soft’ gər ‘house’ |  |  |

F. Frictionless continuants

/w/ voiced labial frictionless continuant occurs in all positions:

| Initial | Medial | Final |
|---------|--------|-------|
| waste ‘for’ | sawal ‘question’ | ‘boat’ |
| wətən ‘country’ | ćawal ‘rice’ | ɡəw ‘wound’ |

/y/ voiced palatal frictionless continuant occurs in all positions:

| Initial | Medial | Final |
|---------|--------|-------|
| yad ‘memory’ | nəya ‘new’ | gay ‘cow’ |
| yər ‘buddy’ | təyar ‘ready’ | hay ‘oh’ |

VII. Distribution and contrast

All consonants, except /ŋ, ɾi, ɻy/, occur at initial, medial and final positions.

VIII. Contrast of articulation

The examples of contrast of voiceless versus voiced and aspiration versus un-aspirated are given below and these illustrate phonemic contrasts:

IX. Stops

1. Voiceless vs. Voiced

/p : b/

| Initial | Medial | Final |
|---------|--------|-------|
| pis ‘grind’ (imp) | upər ‘above’ | jip ‘yawn’ |
| bəs ‘twenty’ | əbəsi ‘now’ | jib |

/p : b}/

| Initial | Medial | Final |
|---------|--------|-------|
| pəul ‘flower’ | sapəai ‘cleanliness’ | sapə ‘clean’ |
| bəul ‘mistake’ | Kəbi ‘sometimes’ | əbi ‘now’ |

/d : t/
### /t̪̊ : d̪̊/

| Initial | Medial | Final |
|---------|--------|-------|
| t̪̊n    | ‘udder’| sat̪̊ ‘together’ |
| d̪̊n    | ‘wealth’| sad̪̊na ‘to fulfill’ |

| /l̪̊ : ɹ̪̊/ |
|-------------|
| Initial | Medial | Final |
| t̪̊l̪̊ | ‘rug’ | ba t̪̊ ‘weight’ |
| d̪̊l̪̊ | ‘branc’ | laj ‘affection’ |

| /t̪̊ : ɹ̪̊/ |
|-------------|
| Initial | Medial | Final |
| t̪̊k̊ | ‘correct’ | sat̪̊ ‘sixty’ |
| d̪̊l̪̊ | ‘loose’ | baḍ̪̊ ‘flood’ |

| /č̪̊ : ɹ̪̊/ |
|-------------|
| Initial | Medial | Final |
| č̪̊r̊ | ‘thief’ | moe̞ ‘sprain’ |
| j̪̊r̊ | ‘force’ | a j̪̊ ‘today’ |

| /k̪̊ : g̪̊/ |
|-------------|
| Initial | Medial | Final |
| k̪̊a | ‘less’ | ek ‘one’ |
| g̪̊a | ‘alley’ | ag ‘fire’ |

| /ξ̪̊ : ɡ̪/ |
|-------------|
| Initial | Medial | Final |
| kr̪̊g̪ | ‘shrub’ | rath ‘desert’ |
| g̪̊r̊ | ‘broom’ | ru ‘hundred’ |

### 2. Unaspirated vs. aspirated

| /p̪̊ : f̪̊/ |
|-------------|
| Initial | Medial | Final |
| p̪̊p̊ | ‘morne’ | spahisi ‘consta’ |
| f̪̊r̊ | ‘fruit’ | p̪̊le ‘grea’ |

| /b̪̊ : ɹ̪̊/ |
|-------------|
| Initial | Medial | Final |
| b̪̊at̪̊ | ‘rice’ | Gambir ‘serious’ |
| ɹ̪̊r̊ | ‘affection’ | lorb ‘greed’ |

| /t̪̊ : ɹ̊/ |
|-------------|
| Initial | Medial | Final |
| t̪̊n | ‘body’ | sat̪̊ ‘seven’ |
| t̪̊n | ‘udder’ | sat̪̊ ‘together’ |

| /d̪̊ : ɹ̊/ |
|-------------|
| Initial | Medial | Final |
| d̪̊o | ‘to wash’ | sind̪̊ ‘Sind’ |

| /t̪̊ : ɹ̊/ |
|-------------|
| Initial | Medial | Final |
| t̪̊a | ‘fish’ | koč̪̊ ‘some’ |
| t̪̊a | ‘pomp’ | K̪̊m̪̊ ‘difficult’ |

| /k̪̊ : ɡ̊/ |
|-------------|
| Initial | Medial | Final |
| k̪̊a | ‘one-eyed’ | M̪̊kan ‘house’ |
| k̪̊a | ‘food’ | Mak̪̊en ‘butter’ |

| /k̪̊ : ɡ̊/ |
|-------------|
| k̪̊a | ‘one-eyed’ | M̪̊kan ‘house’ |
| a | ‘ash’ | |
XII. Contrast of manner

A. Stop vs. frictionless continuant: /b : w/

|   | Initial | Medial | Final |
|---|---------|--------|-------|
| b | ‘twenty’ | kōbor | ‘news’ |
| w | ‘reason’ | awaz | ‘voice’ |

B. Trill vs. lateral: /r : l/ show phonological contrast at all positions:

|   | Initial | Medial | Final |
|---|---------|--------|-------|
| r | ‘secret’ | mFrD | ‘man’ |
| l | ‘shyness’ | mallik | ‘honor’ |

XIII. Consonantal length

There are two degrees of phonetic length in consonants in Mithilanchal Urdu: (i) simple, and (ii) geminates. Simple consonants occur in all the positions whereas geminated occur only in the intervocalic position. All the consonants, except /r, y, h/, can occur geminated which occur only after short vowels. Geminates behave like consonant clusters in the syllabic structure of the language; the first half goes with the preceding vowel and the latter half with the following one. The following examples illustrate the contrast between simple and geminate consonants:

/g : g/  
|   | Initial | Medial | Final |
|---|---------|--------|-------|
| war | ‘day’ | sawar | ‘rider’ |
| yar | ‘friend’ | Styar | ‘jakal’ |

/g : gg/  
|   | Initial | Medial | Final |
|---|---------|--------|-------|
| pəka | ‘cook’ (imp) | pəkka | ‘concrete’ |
| /č : čč/  
|   | Initial | Medial | Final |
| čača | ‘uncle’ | Bōčpōn | ‘childhood’ |
| čhata | ‘umbrella’ | mčči | ‘fish’ |

Frictionless continuants /w, y/ show phonological contrast at all positions:

|   | Initial | Medial | Final |
|---|---------|--------|-------|
| Səja | ‘punishment’ | Sajja | ‘decoration’ |
| /t : tt/  
|   | Initial | Medial | Final |
| Pəta | ‘allure’ (imp) | Pəṭṭa | ‘lease’ |
/d : dd/  
ča / j / ‘climb’ (imp)  čōdd / i / ‘underwear’  
/t : tt/  
ptā / t / ‘address’  ptā / t / ‘leaf’  
čottā / t / ‘roof’  čottā / t / ‘bee-hive’  
/d : dd/  
Kād / i / ‘height’  Kaddu / i / ‘pumpkin’  
/n : nn/  
soni / i / ‘heard’  soni / i / ‘An Islamic sect’  
suna / u / ‘deserted’  Sonna / u / ‘Islamic ritual’  

XIV. Diphthongs

There are two diphthongs in Mithilanchal Urdu: /oi/ and /ou/. /oi/ is generally pronounced loosely as o-i, and, /ou/ as o-u. Mithilanchal Urdu, however, is somewhat tighter in its pronunciation so it depends more or less on the option of the speaker, if s/he contracts /oi/ or /ou/ into a real diphthong or pronounce them separately as two distinct vowels. The process of diphthongization in Mithilanchal Urdu is closely related to vowel clustering. Diphthongs in Mithilanchal Urdu are rising diphthongs, i.e. they end in high vowels /i/ and /u/:

| Initial | Medial | Final |
|---------|--------|-------|
| ainok   | ‘glasses’ | kata      | ‘what kind of’ | maka      | ‘maze’  |
| aina    | ‘like this’ | pota    | ‘coin’ | Wada      | ‘really’ |
| surat   | ‘woman’ | puana   | ‘quarter’ | Loknāu    | ‘Lucknow city’ |
| avtar   | ‘tools’ | suar    | ‘manner’ | dabu      | ‘pressure’ |

XV. Suprasegmentals

A. Stress

The stress is not an important feature in Mithilanchal Urdu, yet it seems that its existence and phonemic status cannot be ruled out. Stress is utilized in disyllabic syllables to distinguish between grammatical categories. In nouns, stress accent falls on the initial syllable and in the verb category it falls on the final syllable. The stressed syllable is marked by the symbol ‘/’.

| Noun       | Verb       |
|------------|------------|
| ‘bola’     | ‘call’     |
| ‘dhila’    | ‘shout’    |
| ‘sila’     | ‘complaint’|

Phonetically, stress is employed to express emphasis. The phonetic correlate is the combination of length and pitch. Emphasized syllables contain a greater amount of energy.

B. Juncture

Juncture is also phonemic in Mithilanchal Urdu. This is not audible as a distinct sound but is realized as a gap in speech in a normal or slow speech. The following contrasts establish the juncture phoneme in Mithilanchal Urdu:

(i) /manada/ ‘to convince’ /man+a+na/ ‘to agree + come’

(ii) /pordsi/ ‘stranger’ /por+de+si/ ‘curtains + sew (imp.)’

C. Intonation

Accent and stress are not distinctive features in Mithilanchal Urdu. Stress in Mithilanchal Urdu is mainly used for emphasis. However, some minor variations in intonation are observed which are shown below: For example, /hʌm gājo:jai-be/ ‘I will go to the village’ This is a simple statement of fact. The intonation changes, if this sentence is interrogative. In this sentence any item may be stressed according to the context and emphasis, which results in change of intonation.

a. Hʌm gājo:jai-be?

b. Hʌmɡa:o:jai-be

c. Hʌmɡa:o:jai-be

d. Hʌmɡa:o:jai-be

Of the above examples, sentence (a) is a question; whereas in sentences (b, c, d) there are emphases on /hʌm/ /gǎo/’l and /jai- be/ respectively.

XVI. Concluding remarks

In this study, a brief sketch of segmental phonology of Mithilanchal Urdu has been presented where in vowels and
consonants and their phonotactic behavior is described in detail. A brief discussion on suprasegmental features such as, stress, juncture and intonation has been presented as unique features of Mithilanchal Urdu.

XVII. REFERENCES

[1]. Chomsky, Noam, and Morris Halle. The sound pattern of English. New York: Harper & Row. (1968).
[2]. Dixit, R.P. The segmental phonemes of contemporary Hindi. Master’s thesis. Austin: University of Texas. (1963).
[3]. Halle, M., &Mohanan, K. P. Segmental phonology of modern English. Linguistic inquiry, 16(1), 57-116. (1985).
[4]. Husain, Masud. Urdu lafz ka sautiyat aur taziyati Muta’la. Aligarh Muslim University. (1986).
[5]. Hyman, L. M. Segmental phonology. The Bantu languages, 42, 58. (2003).
[6]. Ohala, Manjari. Phonological areal features of Indo-Aryan languages. Language Sciences. 13, 107-124. (1991).
[7]. Yadav, R. A reference grammar of Maithili (Vol. 11). Walter de Gruyter. (2011).
Manuscript Processing Footprints

A. Journal Volume/Issue Details

This manuscript it published in Vol. 11 No. 01 2021 issue of IARS’ International Research Journal (I’IRJ). This is a Peer Reviewed (Refereed) International Journal archived with National Library of Australia. The mentioned Volume/Issue is a special issue of the journal dedicated to Covid19 Pandemic Conditions across globe.

B. Citation

Warsi, M J (2021) “SEGMENTAL PHONOLOGY OF MAITHILI URDU (A LESSER KNOWN LANGUAGE SPOKEN IN THE NORTHERN DISTRICTS OF BIHAR)", IARS’ International Research Journal. Vic. Australia, 11(1). Available at: https://research.iars.info/index.php/curie

C. Author Declaration

- The submission has not been previously published, nor is it before another journal for consideration (or an explanation has been provided in Comments to the Editor).
- The submission file is in OpenOffice, Microsoft Word, or RTF document file format.
- Where available, URLs for the references have been provided.
- The text is single-spaced; uses a 12-point font; employs italics, rather than underlining (except with URL addresses); and all illustrations, figures, and tables are placed within the text at the appropriate points, rather than at the end.
- The text adheres to the stylistic and bibliographic requirements outlined in the Author Guidelines.
- All Terms and Conditions about submission and publishing with IARS’ International Research Journal on its official site and other sources have been gone through, understood, and accepted.
- With submission, this is declared that the submitter has all rights of the content, and to submit it. Also the submitter affirms that the rights of the submitted content are hereby transferred to IARS’ International Research Journal and its parent company/publisher, without objections or conditions.

D. Last Plagiarism Report

Settings: similarity of 09 words in a row considered plagiarized.

Originality Assessment

Overall Similarity: 4%

Date: Jan 12, 2021
Statistics: 148 words Plagiarized / 3881 Total words
Remarks: Low similarity detected, check your supervisor if changes are required
Exemption / Relaxation by Editor: None

E. Processing Track

| Date of Submission: | 08 November 2020 |
| Date of Referee/Review – 1: | 19 November 2020 |
| Date of Referee/Review – 2: | 30 December 2020 |
| Date of Additional Review: | NA |
| Date of Acceptance: | 12 January 2021 |
| Date of Publishing: | 08 February 2021 |

----- 0 -----