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An OT Account of Phonological Alignment and Epenthesis in Aligarh Urdu

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ABSTRACT

This paper provides the phonological properties of the alignment and the economical procedures of the epenthesis at the syllable structure of the words in Aligarh Urdu. The paper determines the behavior of certain segments that attach to its own neighboring words and elaborates the economy of the syllable structure of tokens in a particular language. In Aligarh Urdu, there are various types of segmental processes in terms of addition or deletion of phonemes that affects to the root and alters the entire physical mechanism structure of words. The objectives of this paper are to know the exact economic conditions of syllable structures in the words after the addition, elision and alignment of segments in Aligarh Urdu. All the process of conflicts between the addition and deletion of the segments will manipulate within the framework of constraint rankings in Optimality Theory (Prince and Smolensky, 1993). The general purpose of this paper is to reveal the whole criteria of implications of principles of Optimality Theory and explore the actual framework of syllables with their marginal and obligatory components. The researcher governs the phonological property of consonant clusters with the help of faithfulness constraints and markedness constraints. The architecture of root word completely varies from the artificial formulation of other words, but after the imposition of constraints, we reveal the concrete fact of linguistic items in a specific language. The groundwork of this paper leads to the systematic phenomena of epenthesis and the elimination of vowels or consonants with the tenets of OT. This paper deals with the gradient property of segments that alters the framework of underlying form and affected by some other features at the surface form. The generalization of each step of the syllable structure of words should be related to the positional variation of input and output candidates. The conflicts between input and output candidates to become the winner as an optimal candidate can be solved only on the presence of constraint rankings that are evolving in the Optimality Theory.

KEYWORDS: *Optimality Theory; Constraint Rankings; Alignment; Epenthesis*

1. INTRODUCTION

Urdu is one of the Indo-Aryan bases of languages that are consisted of each other with the reference of sharing linguistic features through contact situations. It is one of the official languages out of the 22 languages in the eight schedule constitution of India. There are many assumptions to evolve the Urdu language one of them is that Urdu is derived from Saurseni Apabhramsha through the dialect prevalent around Delhi in the 12th Century. According to S.K. Chatterji (1890-1977), if there had not been such a type of settlement to the recognition of languages for serious literary purposes then it will be difficult to the development of these languages. Mahmood Khan Shirani (1880-1946) stated a hypothesis that Urdu is derived from Punjabi. Another assumption was raised by Muhammad Hasan Azad (1830-1910) that linguistic particles of Urdu are analogous to the Braj Bhasha, so on the basis of particles, it is considered that Urdu is derived from Braj Bhasha. It is hypothesized that Urdu is most influenced by Khari Boli, Haryanvi and Braj Bhasha that are regional dialects of Western Hindi in Uttar Pradesh, India.

The grammatical structure of Urdu is similar to the Khari Boli, but the Phonological and Morphological properties are similar to the Haryanvi. As the typological structure of sentences is identical to the other Indo-Aryan languages, but its vocabulary is derived from Arabic and Persian. In the course of phonological observation, these are borrowed words as lexical items. Aside from Perso-Arabic, there are some lexical items that are borrowed from Turkish which was the once ruling class language in India. It is investigated that Urdu has both Tatsama and Tadbhava, but in the source of contact situations, the words are reduced. Urdu is written from right to left in the Perso-Arabic script. In the sense of phonological properties, Urdu has a congregation of aspiration in both voiceless and voiced sounds and they are in contrastive distribution. It is explored that out of fourteen pure Indic sounds of Urdu, eleven are aspirated and they are fused with 'do chashmi he'.

Optimality Theory is a module of the Generative Grammar that represented the ranking features of the constraints and restricted the phonological procedures of the output

candidates with the comparison of the input candidate. The central idea of OT is that a surface form may be an optimal candidate with the least number of constraints. In the Phonology of Urdu, we will apply the principles of OT to find out the exact considerations of the syllable structures in the root words. OT is a theory of the constraint-based approach that draws the best candidate among all output candidates to mark an optimal candidate. All these processes are related to phonological alignment and epenthesis. The concept of phonological alignment was developed in Phrasal Phonology to the representation of the relation between syntactic constituent and prosodic structure of words. The phonological alignment is the process of the fusion of segments in the left edge or right edge of the grammatical and prosodic words. The left edge addition of segments or syllables is called ALIGN-L and the right edge is called ALIGN-R. The phonological epenthesis is the process of addition of segments either vowel or consonant in the initial, medial or final position of the words. The addition of a particular segment in the initial position is called 'prosthesis', medial position 'anaptyxis' and final position 'paragoge'. The phonological alignment and epenthesis are the two important factors of segment or syllable addition in the words, but they are different from each other on the basis of constraint rankings.

2. Research Objectives

A. To examine the account of the segmental process in the physical structure of the words within the concept of alignment and epenthesis. It will introduce the phonological behavior of each segment in the act of articulation and elaborated the number of tokens in a particular word.
B. To determine the linguistic features of the left and right edges of the alignment segment in the Urdu root word. It will be related to the constraints of the OT to find out the best candidate from the output candidates and mark an optimal candidate.

3. Research Questions

A. Does Aligarh Urdu native speaker have the process of epenthesis and alignment of segments or syllables in the physical structure of the root word?
B. Is it necessary to draw the linguistic features of the root word and its alignment within the advantage of constraint rankings of Optimality Theory?

4. Research Problems

A. The Aligarh Urdu native speakers aligned the segment in the initial and final position of the words and change the actual structure of root, but why do not align the segments in the medial position of the root.
B. The Aligarh Urdu native speakers change the grammatical and prosodic structure of some specific words, but why do not all the root words?

5. The basic architecture of Optimality Theory

This section will be determined an overview of Optimality Theory and its relation with the concept of various constraints. OT is a significant tool of Phonology and other branches of Linguistics that is recently used by many scholars to solve the problems of the syllable structure of the words. OT was first introduced by Prince and Smolensky (1993) for describing the syllable structure of words in a particular language, but soon it spread in other areas of Linguistics because its wide application became very effective at least in all fields of Linguistics. According to Gussenhoven and Haikes (1998), Optimality theory Phonology is thought as a universal set of constraints which are hieratically ranked on a language-specific basis. The relation between input and output is accounted for by respectively generating for each input all possible outputs and evaluating these outputs so as to select the optimal one.

OT is different from earlier works in different ways. First is that it did not offer individual grammars for the description of rules like others, instead, it presented "Gen" (Generator) which performs candidate analysis to generate many forms. Candidates just begin after Gen and located hierarchal top to bottom in the left portion of the tableau. According to McCarthy (2002), "Gen is universal," which means that all produced candidates by Gen for a given input are the same in all languages? These candidates are varied from language to language and the property of Gen is called "inclusive or freedom of analysis".

Alan Prince and Paul Smolensky (1993) introduced that CON tells us what the substantive constraints are, from which grammars are built. It is a central virtue of Optimality Theory that evolved a grammar ranks for all the constraint rankings and it may consist of any other rankings of CON that is a specific grammar of the languages. The third significant key component of Universal Grammar is a precise definition of constraints, which we may sometime know as EVAL, that spells out what it means to be optimal with respect to a ranking of CON. As with the comparison of other components, EVAL is taken to be entirely universal: there is no particular language meddling with the meaning of optimality.

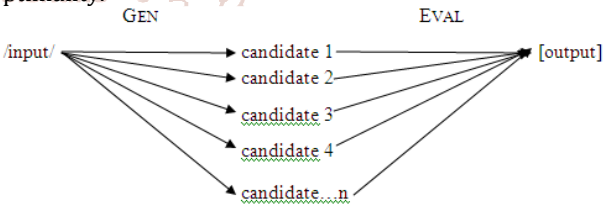


Figure: 3 Interaction between input and output candidates

6. Constraint Rankings

According to the infrastructure of generative phonology, which distinguishes between underlying lexical items and concrete items, and has given the two empirical findings (i) It is concerned about the role of output candidates that are targeted by multiple constraints, must come in two basic species (Prince & Smolensky 1991, 1993). It is also related to the fundamental issues of the hierarchy of constraints (OT Grammar) which elicited an optimal candidate from the multiple candidates. McCarthy (2002, 2008) discussed constraint typology by distinguishing between two major types of constraints such as;

A. **Markedness Constraints:** Markedness Constraints evaluate output representation by forming of the presence of certain configurations. It represented the 'output' form which should be permissible for language structure and language inventories. It has the function of marking an optimal candidate that has the least number of violations or fatal violations after matching with the input candidate. This type of constraint demanding 'well-formedness' structure that has attention towards optimal form for a particular language.

B. Faithfulness Constraints: It ensures the similarity between input and output candidates under evaluation. This type of constraint is a unique constraint for OT. There is also a requirement of 'correspondence' for an optimal candidate than others. Faithfulness constraints demanding exact replication of 'input' along with some specified structural dimensions. Many constraints of Markedness and Faithfulness has discussed earlier in the literature of Optimality Theory, henceforth we are going to discuss some types of other constraints.

Syllable structures and syllabifications of many languages and varieties of languages have different types of constraints discussed in the framework of OT. The following are different types of constraints related to the syllables and syllabifications.

I. **No Coda (NO COD):** It ceases the presence of coda in a syllable and favors open syllable (McCarthy, 2002 & 2008).
II. **No Voiced Coda (*VOI-COD):** Obstruents must not be voiced in a coda position (Kager, 1999).
III. **MAX-Input Output (MAX-IO):** Input segments must have output correspondents that mean "No Deletion".
IV. **DEP-Input Output (DEP-IO):** Output segments must have input correspondents that mean "No Epenthesis".

7. A phonological form of generalized alignment

The concept of a phonological pattern of generalized alignment was developed in the Phrasal phonology for the establishment of the relationship between syntactic constituents and prosodic components in a particular language. The term alignment stands for the coalescence of segments or syllables in the position of word initial and word final. According to Selkirk and Shen (1990), the notion of 'alignment' originates in phrasal phonology, where it was developed in the analysis of relations between syntactic constituents and prosodic phrases. This is an 'edge-based' theory that determines the interaction between phonology and syntax interface adopted by Prince and McCarthy (1993) in Optimality Theory, who claimed that there should be the interface between prosody-morphology excessively in terms of alignment constraints. There are four major alignment constraints to the addition of external segments or syllables in the root structure of the words:

a. ALIGN-L

The left edge of the Grammatical Word (GrWd) coincides with the left edge of the Prosodic Word (PrWd). It is a constraint that restricts the addition of the segments or syllables at the beginning of the words.

b. ALIGN-R

The right edge of the Grammatical Word (GrWd) coincides with the right edge of the Syllable (σ). It is a constraint that restricts the addition of the segments or syllables in the final positi

c. ALIGN-MORPH-L

The left edge of a morpheme (| |) coincides with the left edge a syllable (σ). It is a constraint that restricts the addition of the morphs in the initial position of the root words.

d. ALIGN-MORPH-R

The right edge of a morpheme (| |) coincides with the left edge of e syllable (σ). It is a constraint that restricts the addition of a particular morph in the final position of the root words.

In all the alignment constraints there is a convenient relationship between Grammatical Category (grammatical word or morpheme) and prosodic category (prosodic word or syllable) and paired such as:

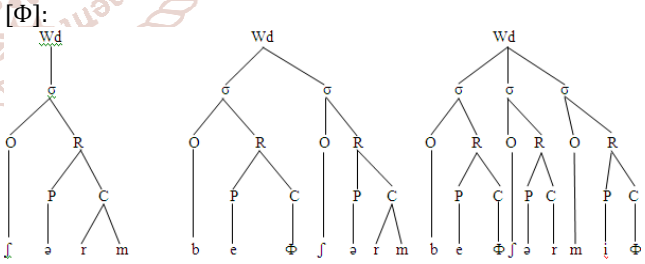
		Gram-Cat	Pros-Cat	Edge
a)	**ALIGN-L**	GrWd	PrWd	Left
b)	**ALIGN-R**	GrWd	Syllable	Right
c)	**ALIGN-MORPH-L**	Morpheme	Syllable	Left
d)	**ALIGN-MORPH-R**	Morpheme	Syllable	Right

(Kager, 1999, p. 118)

The alignment constraints may be represented to the morphological constituents (root, stem, base or affix) and prosodic constituents (foot or mora). These types of generalized alignment come to the approaches of the constraints and define the edges of the root words.

8. A phonological epenthesis and the conflicts constraints

A phonological epenthesis is a type of phonological process that added the segments or syllables in the initial (prosthesis), medial (anaptyxis) or final (paragoge) position of the words in a particular language. According to Selkirk and Ito (1986, 1989), epenthesis and syllabification are the key units of the derivational phonology that are already connected to the architecture of the words. They claimed that an epenthetic segment is a critical form of the empty nuclei of the syllable that is required to a language-specific 'syllable template'. This template determined whether a syllable has a requirement of onset and coda or not in a particular word. It is sated in Optimality Theory that epenthesis is involved in the violation of the faithfulness constraints and well-formedness constraints. The epenthetic segments or syllables did not preserve the linguistic features of the input candidate. **For example,** the empty coda of the first and last syllable /beʃərmi:/ in Urdu are spelled out as [Φ]:



In this model, epenthesis is the full consequence of syllabification and represented the empty coda condition in the first and final syllable template. Accordingly, there is no exact rule of epenthesis related to the syllable template, but enforcing the rule of syllabification.

9. Literature Review

Optimality Theory (OT) has originally been developed for dealing with phonological problems, abandoning the assumption that grammatical constraints are inviolable (Prince & Smolensky 1993/2004, McCarthy & Prince 1995). According to Carr (2008), OT is a model of the Generative Grammar that is consisted of the crucial constraint rankings. There are certain types of constraints that are listed in the tableau from left (most powerful) to right (least powerful).

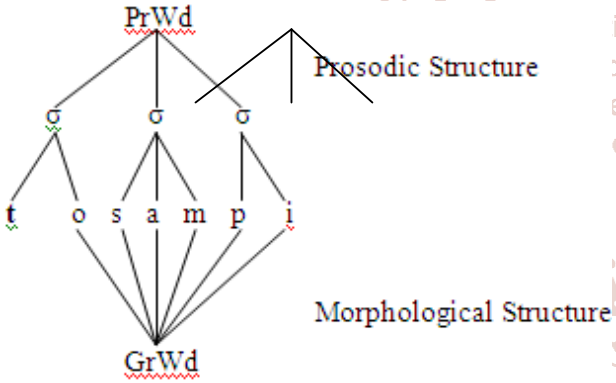
The tableau for the OT analysis of an input candidate /film/ with the help of constraints

/film/	DEP-IO	MAX-IO	*COMP-CODA
a. [fɪl]		*!	
b. □[fɪlm]			*
c. [fɪləm]	*!		

Table: 1 The Consideration of constraints and candidates with the reference of input

In the above tableau, the candidate 'b' is the winner as an optimal candidate compared to the other output candidates because it is satisfied with the highest and higher rank of constraints as DEP-IO and MAX-IO, while violated to the lowest rank of constraint *COMP-CODA.

According to Kenstowicz (1994b), Spencer (1994) and Blevins (1995), the simple model of alignment and epenthesis does not carry any development account of morphological influence over root word in a language. The cross linguistic evidence has the process of alignment and epenthesis that increases the level of morphological constituents at an extreme position and maximally respected in a specific environment of the words. According to Kager (1999), alignment and epenthesis are the more general phenomena that may be considered by certain types of constraint rankings in the account of the left or right edge of the structure of the words. There is a misaligned nature of the segments in a root word that declared as a suboptimal candidate representing both prosodic structures as well as morphological structure:



We can observe that the left edge of the grammatical word is defined by the initial segment of the stem as [o], whereas the left edge of the prosodic word is defined by the epenthetic and alignment segment [t]. It is represented that both the edges do not coincide due to the violation of the constraints. A full account of the alignment and epenthesis can be represented within the procedure of the hierarchy of constraints that restrict the phenomena of the output candidates. The hierarchy of the constraints is listed in the proper arrangement of ranking and sub-ranking features of the input and output candidates:

Onset epenthesis and alignment representing left word edge
ALIGN-L >> MAX-IO >> ONSET >> DEP-IO

A.	/khəri:ɖ/	'buy'	/khəri:ɖɖa:r/	'buyer'	/khəri:ɖɖa:ri:/	'purchase'
B.	/i:ma:n/	'conscience'	/i:ma:nɖa:r/	'honest'	/i:ma:nda:ri:/	'honesty'
C.	/khʊɖ/	'self'	/khʊɖɖa:r/	'selfish'	/khʊɖɖa:ri:/	'selfishness'
D.	/pehra:/	'duty'	/pehreda:r/	'guard'	/pehreda:ri:/	'guard duty'
E.	/pərɖa:/	'veil'	/pərda:da:r/	'veiled'	/pərɖa:da:ri:/	'drape'

Tableau for the OT analysis of the input candidate /osampi/ in Axininca ranking

/Osampi/	Align-L	Max-Io	Onset	Dep-Io
a. □ [o.sam.pi]			*	
b. [to.sam.pi]	*!			*
c. [sam.pi]		*!		

Table 2: the interaction between constraints and output candidates to draw an optimal candidate

In the above tableau, the candidate 'a' is satisfied with all the constraints except the lower rank of the constraint ONSET and has the least violation as compared to the other output candidates. It preserves all the linguistic features of the input candidate except the one onset in the first syllable of the word. So, in this context, it becomes the best candidate as compared to others and marked an optimal candidate by □.

10. Methodology

10.1 Materials and Methods

The researcher has collected the data from the native speakers of Aligarh Urdu by regular contact through the interview. The nature of data is the primary and actual representation of native speakers of Urdu. The researcher has used the high quality of the instrument as a tape recorder and put it just approach to the mouth of the native speakers for the data collection. After the collection of the data the researcher transcribed it into phonemic transcription and applied the principles of the Optimality Theory to solve the problems of the syllables related to the alignment and epenthesis in the Aligarh Urdu tokens.

10.2 Participants

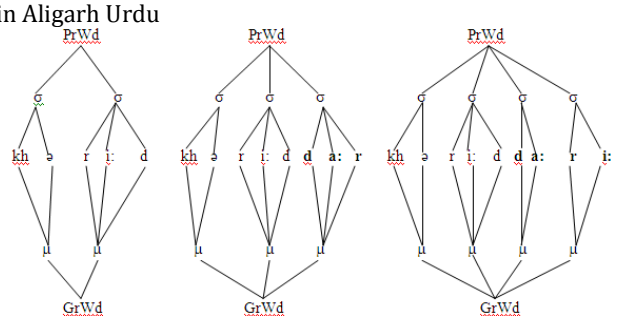
The researcher has collected data from the twenty participants between the age group of 25 to 40. The data are referred to the ten males and ten females equal proportion of the gender probability to the Aligarh Urdu native speakers. All the participants were actual inhabitants of district Aligarh that are in regular contact with other language speakers too.

11. Data Analysis

11.1 A phonological account of right edge alignment and epenthesis in Aligarh Urdu

An alignment is a model of phrasal phonology that constructs the efficient relationship between the root word and its additional properties consider to the syntactic constituents and prosodic phrases. According to Kager (1999), alignments are the more general phenomena than epenthesis that may be considered by certain types of constraint rankings in the account of left or right edge in the structure of the words. The term alignment is most similar to the epenthesis, but the coalescence and fusion properties are apart to eachother. **For example,** in Aligarh Urdu the Alignment play a key role to the addition of extraneous segments or syllables in the root words:

The coincidence of morphological edges and prosodic edges in Aligarh Urdu



The right edge of the grammatical word initially is identified by the suffix [-da:r] and after that segment [–i:], henceforth both edges have not coincided in the violation of ALIGN-R. The relationship between both the edges is strong to change the grammatical category of words. The derivational edge [-da:r] always comes before the inflectional edge [-i:] in Aligarh Urdu. We will now consider the OT approaches that are related to the candidates:

A. /khə.ri:d̪/ 'buy' satisfied with the DEP-IO, MAX-IO, ALIGN-R, and ONSET, while violated to the *VOI-CODA.
B. /khə.ri:d̪.d̪a:r/ 'buyer' satisfied with the MAX-IO and ONSET, while violated to the DEP-IO, ALIGN-R and *VOI-CODA.
C. /khə.ri:d̪.d̪.a:.ri:/ 'purchase' satisfied with the MAX-IO and ONSET, while violated to the DEP-IO, ALIGN-R and *VOI-CODA.
D. /khə.ri:.d̪a:r/ satisfied with the ONSET, while violated to the DEP-IO, MAX-IO, ALIGN-R and *VOI-CODA.

We will now consider the representation of constraints to know about the format of the candidates that are categories into the morphological and prosodic structure of the words:

The tableau for the OT analysis of input candidate /khə.ri:d̪/, assumes ranking in Aligarh Urdu

/khə.ri:d̪/	MAX-IO	DEP-IO	ALIGN-R	ONSET	CODA
a. [khə.ri:d̪.d̪a:]		*!	*		*
b. [khə.ri:d̪]					*
c. [khə.ri:d̪.d̪a:.ri:]		*!*	**		***
d. [khə.ri:.d̪a:r]	*!	*	*		**

Table 3: the interaction between input and output candidates within the constraints

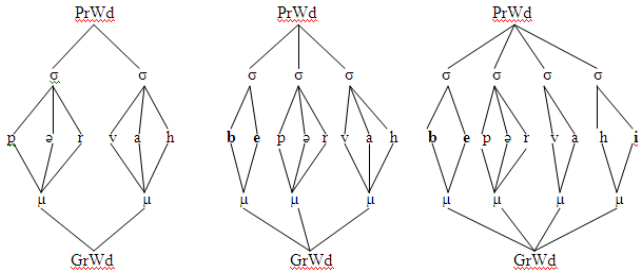
In the above tableau, there is a hierarchy of constraints on their ranks of dominating features. The leftmost constraint is the most powerful and the rightmost constraint is the least powerful in the hierarchy of constraints: MAX-IO >> DEP-IO >> ALIGN-R >> ONSET >> CODA

11.2 A phonological account of left edge alignment and epenthesis in Aligarh Urdu

The left edge alignment and epenthesis is the process of addition of a particular segment or syllable in the beginning position of the words. The left alignment and epenthesis are the only derivational edges to the addition of a root that altered the grammatical and prosodic categories of the words. Alignment is the more general phenomenon than epenthesis related to the observation of the constraints. **For example,** the left edge alignment and epenthesis altered the physical mechanism of the root word structure in Aligarh Urdu:

A.	/pərvah/	'care'	/bepərvah/	'careless'	/bepərvahi:/	'carelessness'
B.	/əd̪əb/	'respect'	/beəd̪əb/	'disrespect'	/beəd̪əbi:/	'disrespectful'
C.	/ʃərm/	'shy'	/beʃərm/	'lost of shy'	/beʃərmi:/	'lack of shy'
D.	/səbr/	'patience'	/besəbr/	'impatience'	/besəbri:/	'restless'

The phonological behavior of the segments or syllables in the initial position of the framework of the grammatical and prosodic structure of the root words. The coincidence of morphological and prosodic left edges in Aligarh Urdu:



There is the condition of the left hand and right-hand edges within the root word that are misaligned because epenthetic morph is stood at both sides. We will now consider the theoretical framework of Optimality theory within their constraints such as:

A. /pər.vah/ satisfied with MAX-IO, DEP-IO, ALIGN-R, and ALIGN-L, but violated to the *VOI-CODA.
B. /pər.va/ satisfied with DEP-IO, ALIGN-R, and ALIGN-L but violated to the MAX-IO and *VOI-CODA.
C. /be.pər.vah/ satisfied with MAX-IO and ALIGN-R, but violated to the DEP-IO, ALIGN-L and *VOI-CODA.
D. /be.pər.va.hi:/ satisfied with MAX-IO, but violated to the DEP-IO, ALIGN-R, ALIGN-L and *VOI-CODA.

We will now consider the hierarchy of constraints of OT that will determine the formulation of input and output candidates in Aligarh Urdu.

OT analysis of input candidate /pər.vah/, assuming the feature rankings in Aligarh Urdu

/pərvah/	MAX-IO	DEP-IO	ALIGN-R	ALIGN-L	*CODA
a. [pər.va]	*!				*
b. □[pər.vah]					**
c. [be.pər.va]		*!		*	**
D. be.pər.va.hi:		*!*	*	*	*

Table 4: the phonological interaction between input and output candidates within the constraints

Here is the account of dominating features of constraints in a specific hierarchy with their linguistic features of input and output candidates:

MAX-IO >> DEP-IO >> ALIGN-R >> ALIGN-L >> *VOI-CODA

12. Results and Discussions

In the data, we have analyzed that the root words consist of certain types of other segments as the form of morph that altered the whole physical mechanism and draw a new grammatical category of word. In table 3, the candidate 'a' is satisfied with the highest rank of constraint MAX-IO and the lower constraint ONSET, while violated to the other higher, lower and lowest rank of constraints as DEP-IO, ALIGN-R, and CODA. So, in this context the candidate 'a' is not a winner candidate to mark the optimal candidate. The candidate 'b' is satisfied with MAX-IO, DEP-IO, ONSET, and ALIGN-R, but violated to the merely one constraint CODA, because the features of candidate 'b' are more similar to the input candidate. So, the candidate 'b' is the best candidate among the other output candidates and marked as an optimal candidate that is indicated by □. The candidate 'c' is satisfied with the MAX-IO and ONSET, while violated to all other constraints as DEP-IO, ALIGN-R, and CODA because the linguistic features are not similar to the input candidate to become an optimal candidate. The candidate 'd' is satisfied only with a single constraint ONSET. It violated all other constraints as MAX-IO, DEP-IO, ALIGN-R, and CODA. There is not a single feature that preserves the process of input candidate to become the best candidate among the other output candidates.

In table 4, the candidate 'a' is satisfied with the markedness constraints as DEP-IO, ALIGN-R, and ALIGN-L, but violated to the highest and lowest rank of constraints as MAX-IO and *CODA. In this process, the candidate 'b' is not marked as an optimal candidate because of the lack of evidence related to the input candidate. The candidate 'b' is satisfied with the highest, higher and lower rank of the constraints as MAX-IO, DEP-IO, ALIGN-R, and ALIGN-L, but violated to the only lowest rank of constraint *CODA. So, in this procedure, the candidate 'b' has the most analogous features related to the input candidate except voicing. It became the best candidate among the other output candidates and represented as an optimal candidate that is marked by □. The candidate 'c' is satisfied with the highest and higher rank of constraints as MAX-IO and ALIGN-R but violated to the other constraints as DEP-IO, ALIGN-L, and *CODA. The candidate 'd' is satisfied only with the highest rank of constraint MAX-IO, while violated to all other types of constraints as DEP-IO, ALIGN-R, ALIGN-L, and *CODA. So, in this phenomenon the candidate 'c' and the candidate 'd' are involved within the highest rank of violations and fatal violations, to be unmarked as an optimal candidate.

13. Findings

In this study, we have evaluated that if any extraneous segment or syllable is added in the initial or non-initial position of a root word then it will be altered into another grammatical form in Aligarh Urdu. We find out how a correspondence diagram represented the addition of segments in both right edges as well as in the left edges of the root words. We also examined how the constraints worked on the principles of OT and draw the best candidate as an optimal out of the other output candidates. We find out that a candidate is marked as an optimal candidate that has the least rank of constraints as compared to the other output candidates. Every candidate is represented within different types of constraints and one of the constraints is relevant to the highest rank of constraint that has dominant features. In table 3, the candidate 'd' and in table 4, the candidate 'a' are involved within the highest rank of constraints that cannot be never an optimal candidate because the features are far away from the input candidate.

14. Conclusion

In this research paper, we have generalized the idea of the alignment and epenthesis within their economic conditions with the implications of constraint rankings of Optimality Theory in Aligarh Urdu. It is examined that the syllable structure of a particular word became apart with the addition of segments or syllables. The basic procedure of this paper we have evaluated that the economic property of the syllable structures become elaborate after the convention of alignment and epenthesis. It is represented that after the implications of constraints on output candidates matching with the features of the input candidate we draw the best candidate as an optimal candidate in Aligarh Urdu.

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