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Peculiarities of Metathesis in Kunha Language

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ABSTRACT

This paper focuses on metathesis, a linguistic phenomenon observed in the unique language called Kunha, a part of the North-Dravidian language family, where sounds are swapped within words. So, instead of the anticipated order of ..xy.. in a sequence of participating sounds, we encounter ..yx.. The final segments of a word can vary depending on the context; in some cases, they appear as a vowel followed by a consonant, while in others, they may be a consonant followed by a vowel. Metathesis in the Kunha language (Odisha, India), analysing its phonological patterns and linguistic implications from a synchronic perspective. Data was collected via 5,000 lexicons and sociolinguistic interviews with NORMs in Sundergarh and Sambalpur districts of Odisha state, alongside comparisons to Kurux and Dravidian etymological sources. Theoretical frameworks categorise metathesis as (1) copy-delete/coalescence operations, (2) transposition outcomes, or (3) allomorphy-driven CV/CC/CVC rearrangements. The results focus on Kunha's pervasive yet irregular CV/CC/CVC metathesis, previously undocumented, highlighting its typological rarity and challenges for linguistic prediction. For example, the word /oɽok/ 'bark of a tree' in Kurux, changes to /uɽku:/ in Kunha. Similarly, /calkur/ 'sand, gravel' in Kurux, transforms to /calkri:/ in Kunha. These peculiarities in sound change are not limited to CV (consonant-vowel) clusters; they also occur in CC (consonant-consonant) clusters. For instance, /ma:kcu:ɳɖ/ 'name of a flower' in Kurux, changes to /ma:sku:ɽ/ in Kunha, resulting in the sound change from [kc] to [sk]. Additionally, metathesis can affect CVC (consonant-vowel-consonant) order, as seen in the transformation of /letheɽ okk-a:/ 'to sit with the legs crossed' in Kurux, into /thepeɽ okk-a:/ in Kunha, yielding the change from [leth] to [thep]. Due to these sound transpositions, there is an emergence of a new speech variety called Kunha.

I. INTRODUCTION

Each language has its own peculiarities and should be described with its descriptive notions rather than making assumptions. Kunha (pronounced as *kũŋhã*) is a speech variety of Kurux belonging to the North Dravidian language family and spoken by Kisan, Kuda, Matiya, and Mirdha tribes in the Odisha state of India. The language was erroneously reported as part of the Austro-Asiatic family by Sten Konow, the then government epigraphist (See in Grierson, 1906). The language was later recognised as North Dravidian and documented to be distinct from Kurux/Oraon

in the government of India's linguistics report (Perumalsamy, 2002 & 2004). It must be noted that the term 'Kisan' is an exonym used by non-native speakers to refer to the language and the tribe. On the other hand, the term 'Kunha' is used as an endonym by the native speakers and essentially denotes both the language and the tribe. The speakers of Kunha call themselves 'Kunhar' ~ 'Kurkhar' (pronounced as *kũŋhãr ~ kuɽxar*) (Goswami, 1989; Kujur, 2021). Kunha language is spoken by four different tribes in the Odisha state of India, e.g. Kisan, Kuda, Matiya, Mirdha. However, the language has unfortunately been indexed recently as 'Kisan' rendering importance to

outsider view and not as 'Kunha' with a three-letter code (ISO 639-N°. xis) for Kisan, Kuda, Mirdha, and Birhor tribes by *Ethnologue* (2018 [see also in Eberhard et al., 2023]) and not for Matiya tribe (see also Glottolog code: kisa1260).

The term 'Kunha' is a significant linguistic and cultural marker for the Kisan, Kuda, Matia, and Mirdha tribes, which are geographically separated but share a deep cultural bond. The use of 'Kunha' to refer to their shared language highlights the linguistic unity among these tribes, even though they may not live close to one another. The preference for this term by native speakers is rooted in the desire to foster a sense of solidarity and shared identity among individuals from these diverse tribal groups. This shared language creates a bridge between communities that, while isolated by geography, remain connected through cultural practices, traditions, and language. Using 'Kunha' as a unifying term also plays a crucial role in promoting social cohesion. It gives the speakers a sense of collective belonging, allowing them to overcome the divisions imposed by geographic and social barriers. This shared linguistic identity helps to mitigate feelings of fragmentation and builds a sense of common heritage and purpose among the tribes. Continuous efforts are made to officially recognise this unified identity by registering a 'Kunha Samaj' (society for Kunha speakers) with the government of India. This registration is essential in formalising the social cohesion fostered by the language and reinforcing the tribes' collective identity in a national context. By establishing a single society that represents all Kunha speakers, these tribes aim to strengthen their presence and advocacy for their rights, welfare, and cultural preservation.

The phenomenon of metathesis involves the reversal of linear order with two segments. It most commonly occurs with a vowel and /r/ and is attested widely across many languages. For example, 'bridde' = 'bird' = (Middle English and Modern English) and 'modern' /mɒdɹən/ = (Modern English and Irish English).

Similarly, metathesis may also occur with two consonants. In the history of English and among different language varieties, a change of order with /ks/ or /sk/ to /sk/ or /ks/ is frequent, e.g. 'ask' derives from Old English 'ascian', which also showed a variant 'acsian'. The second form

is the source of the modern word. It stems from the first form by metathesis and was subject to metathesis again, reversing the original change in segment order. In the period when it was /aksian/, the palatalisation of /sk/-clusters took place — cf. 'dish', Old English 'disc' from Latin 'discus' — but the metathesis form was not affected. After the reversal of the first metathesis, the form 'ask' resulted and retained this pronunciation, which is why one does not have /æʃ/ in Modern English, which would be the regular development of Old English 'ascian' (an argument for this is found in Bauer & Warren, 2004).

Studying metathesis in the Kunha language for the first time adds to linguistics via phonological processes. Metathesis in Kunha follows distinct patterns. It is the rearrangement of sounds within words. The reversal movement may be due to phonetic ease, language contact, or historical stages. Linguistic analysis includes inversion sounds, conditions, patterns, and effects on word constructions. Linguists examine how metathesis interacts with morphology, meaning, word formation, and historical development. With cross-variation between words regarding metathesis functioning, linguists can predict patterns and variability within a language. Metathesis models in Kunha are probable cultural and historical determinants. Understanding this model exposes the language's development and history in time and space. The investigation improves the knowledge of the culture and language of the Kunha-speaking community. Recording and documenting metathesis in Kunha, as in all endangered languages, is important for preservation and other linguistic resources, which will spur further work on this language. Language material can save some phonological Kunha descriptions to revive and secure the language.

The Dravidian language sub-grouping places Kurux/Oraon and Malto in the Central group, with Brahui isolated. Based on shared phonological features, Emeneau (1962) suggests the possibility of Brahui and Kurux-Malto forming a sub-family within the Dravidian family. Despite Andronov (2003) bringing Kurux and Malto under a North-Eastern subgroup and Brahui forming a North-Western sub-group, most scholars, like Emeneau (1962), Krishnamurti (2003), Kobayashi and Oraon (2017) and Steever (2019) argue for a North Dravidian group consisting of Kurux/Oraon, Malto,

and Brahui. At the same time, Kurux is relatively autonomous and hence given a classification status, with Malto being its closest cognate. However, a few recent studies on Kunha (Kujur, 2016, 2021 & 2024) show some dialectal differences when compared with Kurux. Grierson (1906) reports that speech varieties of a language are the outcomes of Indo-Aryan influences in North and Central India, and so are the dialectal differences in Kunha. Roy (1915) notes that Kurux are identified as Dhangars or Kisans in different regions, showing complex interactions. A more comprehensive study to include linguistic, cultural, and historical dimensions is much needed. The linguistic studies of Kurux, Malto and Brahui and their associated speech varieties within the Dravidian language family need more attention from future researchers (Subrahmanyam, 1971).

Russell Ultan's seminal work in 1978 presents the first cross-linguistic metathesis analysis, including numerous types of sounds involved in the process, the types of metatheses, their manifestation, and the implications for the phonological processes and derivation. He claims that such a description "encompasses all sounds and kinds of sounds likely to be involved directly or indirectly in metathesis". Then, he tries to list "sociolinguistic justification for metathesis systematically" (Ultan, 1978: 409). Blevins and Garrett (1998 & 2004) systematise and describe types of consonant-vowel metathesis, arguing against saying what is "commonly said, that metathesis is less than fully phonetic in nature". The authors mention the universality of "natural, phonetic bases for metathesis" and specific cases of metathesis in the Leti, Luang, and Wetan languages. It suggests a new analysis of the diachrony of metathesis in Leti, overlooks examples of high-vowel metathesis in other languages, and claims it is possible to explain metathesis from the perceptual point of view. They further analyse how phonetics can be related to phonology and phonological underpinnings. Mielke and Hume (2000) add more evidence regarding the comparative rarity of metathesis compared to assimilation. Metathesis is expected to occur less often because it can significantly hinder word recognition relative to assimilation.

Subsequently, Hume (2001 & 2004) proposes that rather than metathesis being random and unpredictable, a fuller understanding of why gemmation occurs and its functional and formal dimensions can also offer a more phonological theory of metathesis. The external factors that shape the patterns of metathesis determine how metathesis may be understood. She further explains how gemmation can happen across languages and why certain consonant groups result in metathesis when gemmated. She analyses the patterns of gemmation across the different languages and states that the phonetic nature and the native sounds of language help understand gemmation as it results from indeterminacy in the signal. She also suggests that gemmation may result from speech processing and word recognition effects.

According to Stonham (2006), metathesis transposes elements in a string for reordering, which can also be used to analyse them using constraint-based approaches like optimality theory. Metathesis involves converting marked structures into more acceptable ones. Buckley (2011) examines some metathesis phenomena, such as theoretical perspective in linguistics, perceptual metathesis, and phonological conditioning in languages. He discusses VC metathesis in surface forms caused by an overwriting pattern and illustrates how metathesis can be applied to loanwords in different languages. Chandlee and Heinz (2012) explore the conditions for sub-sequential copying and deletion processes. They analyse metathesis as a composition of copying and deletion, determine whether metathesis and reduplication are sub-sequential or reverse sub-sequential, and apply computational analysis of copying and deletion in linguistic patterns. Chandlee (2023) discusses the transposition of segments to mark inflection and the transposition or displacement of morphemes and presents a series of metathesis examples in four categories along a phonology–morphology continuum.

On sound reversals of the Afroasiatic language, Hume and Seyfarth (2019) examined metathesis of the interaction of 'h' assimilation as metathetic changes in Classical Mandaic, a distinct form of Aramaic used in ritual context (see also Macuch, 1965 [2014]), realising that "vowels and consonants do not belong to the same class" is crucial to understanding these sound patterns. They provide evidence that "consistent synchronous metathesis does occur in a wide variety of languages". They also present different formal accounts and factors that condition metathesis by providing Yuman language (a subgroup of the Hokan language

family) data tested against universals proposed by Ultan (1987). Hume and Seyfarth (2019) suggest possible ways to integrate phonological and syntactic approaches in further research.

Kiegel-Keicher (2020) captures a simple metathesis in Ibero-Romance /arabisms/ V/s. /andalusi/. Arabic focuses on syllable structure and weight relations in loanwords, with a brief final section on metathesis's odd, largely optional association with Arabic-Romance phonology. Gilbert and Mooney (2022) claim that metathesis is gestural overlap and a phonological explanation. Phonology has an early and late stratum with different representations. Late phonology has only gestures, not atomic segments.

The metathesis phenomenon is viewed as an odd character having rare cases with a few samples in the languages, and so it has been called sporadic (Powell, 1985), irregular (Montreuil, 1981), or sometimes altogether non-existent (Webb, 1974). It has received little attention from researchers in the literature. Yet, many cases of productive phonological metathesis have been documented over the years (Hume, 1998; Blevins & Garrett, 1998; McCarthy, 2000; Hume, 2001, and others).

This paper explores the unique metathesis patterns in the Kunha language, focusing on transposition effects and CV/CC/CVC rearrangements. The study highlights Kunha's widespread but irregular metathesis, previously unrecorded, and its rarity in world languages, posing challenges for linguistic theory. It highlights the important role of the metathesis phenomenon in contributing to the formation of a new speech variety called the Kunha language.

II. METHODS

This research investigates the phenomenon of metathesis and its linguistic implications in the formation of the Kunha language, spoken in the Odisha state of India. The study is approached from a synchronic phonological perspective, remarking on its typological oddity and that of a native speaker.

Data Collection

To collect data on the Kunha language, the *Language Documentation Handbook* by Rao (2016) was utilised. The primary data set comprises a list of 5,000 lexicons gathered through informant

interviews. Additionally, sociolinguistic interviews were conducted to collect spontaneous speech in natural settings, focusing on identifying instances of metathesis. The research was conducted in the districts of Sundergarh and Sambalpur in Odisha, with a random sampling method employed to select participants, specifically targeting NORMs (Non-mobile, Rural, and Male speakers) - 10 male participants aged sixty-plus living in rural areas were taken up.

The study also compares data from the Kurux language with the Kunha language to observe occurrences of metathesis. Several lexicons were cross-checked with the *Dravidian Etymological Dictionary Revised* (DEDR) by Burrow and Emeneau (1984) to trace their etymological origins.

Theoretical Framework

The three theoretical frameworks in metathesis can be summed up as first, and metathesis is not transposition but the serial application of smaller copy-and-delete or coalescence operations (Besnier, 1987; Hume, 1991; Blevins & Garrett, 1998; Takahashi, 2018 & 2019; Mooney, 2022). Second, metathesis is an outcome of transposition (Hume, 1998, 2001; Canfield, 2016). Third, Allomorphy-based accounts of metathesis deal with metathesised allomorphs formed by fully transposing the CV segments (Edwards, 2018 & 2020). In the present article, the transposition of CV, CC, and CVC syllable segments are analysed and discussed in view of metathesis. It is highly restricted and exhibits an irregular distribution, posing difficulties in analysing and making linguistic predictions.

The present article relies on novel data from original fieldwork on the Kunha language (Odisha, India), a North Dravidian language with robust CV, CC, and CVC metathesis. There has been some descriptive work on the language (Goswami, 1989; Kujur, 2016 & 2021). However, there is no discussion on the Kunha metathesis, which is productive occurring with almost all segments in the language.

III. RESULTS

Vowel-Consonant Metathesis

Metathesis involves the exchange or reversal of adjacent sounds, particularly a vowel and a consonant. This phenomenon alters the phonetic structure of words between Kurux and Kunha,

reflecting dialectal variation within the same language family. Kunha language of Odisha presents distinct features of metathesis in the following examples:

Metathesis of vowel /a/, and consonant

The lexicons in Kurux underwent metathesis involving a vowel /a/ and a consonant to form a new language, Kunha.

Kurux		Kunha	Meaning	Metathesis
/ekda:/	>	/eka:d/	'who, which'	[da:] > [a:d]
/tal-i:/	>	/atl-i:/	'copula verb (present tense)'	[ta] > [at]
/apʈa:/	>	/apoʈ/	'complete (__*dusmani*)'	[ʈa:] > [oʈ]

Metathesis of /u/, and consonant

The following data shows the involvement of the sound /u/ in the metathesis process in the Kunha language. The metathesised outcomes are presented as [uk] > [ku:], [ut] > [tu], [ukʰ] > [kʰu], [ur] > [ri:]. Odisha. A random sampling method was employed to select participants, specifically targeting NORMs (Non-mobile, Older, Rural, and Male speakers); 10 number of male participants aged sixty plus living in rural areas of Sundergarh and Sambalpur districts of Odisha.

Kurux		Kunha	Meaning	Metathesis
/oɽok/	>	/uɽku:/	'bark of a tree'	[uk] > [ku:]
/orot/	>	/urtu/	'indefinite article'	[ut] > [tu]
/xall-ukʰɽi:/	>	/hallu-kʰuɽi:/	'agriculture'	[ukʰ] > [kʰu]
/calkur/	>	/calkri:/	'sand, gravel'	[ur] > [ri:]

Vowel sound /i/, and consonant

Metathesis in Kunha involves /i/, and /a/ vowel sounds as a part of CV in Kurux > VC in Kunha structural changes, which include [li] > [il], [im] > [na], etc. in the following examples.

Kurux		Kunha	Meaning	Metathesis
/lidrʔ-a: /	>	/ildr-a:/	'to get up'	[li] > [il]
/idim/	>	/idna:/	'just at present (i.e. nowadays)'	[im] > [na]

Metathesis and Aspirated sound

Metathesis with aspiration sound is a linguistic phenomenon where the order of sounds in a word is changed, typically resulting in the placement of an aspirated sound in a different position within the word. For example, in Kunha, metathesis with aspiration sound can be observed in words like /tuppʰalo:/ 'saliva, spittle', /umbʰalo:/ 'liver; kidney, heart, lungs', /gucʰa:-ba-a/ 'to move away; to throw away' - a change involving aspiration.

Kurux		Kunha	Meaning	Metathesis
/tuppalxo:/	>	/tuppʰalo:/	'saliva, spittle'	[palx] > [pʰal]
/umbalxo:/	>	/umbʰalo:/	'liver; kidney, heart, lungs'	[balx] > [bʰal]
/gucʰa:-baʔ-a:/	>	/gʰuca:-ba-a/	'to move away; to throw away'	[gucʰ] > [gʰuc]
/letʰeɽ okk-a:/	>	/tʰepeɽ okk-a:/	'to sit with the legs crossed'	[letʰ] > [tʰep]

Metathesis between two consonants

There are instances of metathesis involving two consonants. It is a linguistic phenomenon where the order of two or more consecutive consonant sounds within a word is changed. This can occur for various reasons, including ease of pronunciation, phonotactic constraints, or language evolution. Kurux words exhibit a linguistic process of metathesis in Kunha, for example:

Kurux		Kunha	Meaning	Metathesis
/ma:kcu:ŋɖ/	>	/ma:sku:ɽ/	'name of a flower'	[kc] > [sk]
/hoɽm-baʔ-a:/	>	/homɽa-ba-a:/	'to throw one down headlong'	[ɽm] > [mɽ]
/xarɖka:/	>	/haɖrka:/	'stolen'	[rɖ] > [ɖr]
/lapsa:rʔ-a:/	>	/lahpa:r-a:/	'to take long strides'	[sp] > [hp]
/õ:saɽgo:/	>	/õ:ɽska:/	'a kind of mushroom'	[sɽ] > [ɽs]

IV. DISCUSSION

The occurrence of metathesis is exhibited in the Kunha language with the transposition of VC or CV, CC, and CVC structures. The CC and CVC instances are rare in most languages of the world. Hume (2001) and Horwood (2004) have observed that the typology of metathesis is far more restricted. It is often limited to certain segments or a few morphemes in a given language. Metathesis uses transposition, a single operation that changes the precedence relations of two segments, e.g. CV, in the following examples:

- The feminine suffix has two variants, /-ni/ and /-i(n)/. Kunha uses only the latter, while Kurux uses both. For instance, /khaɽiya-in/ ~ /khaɽiya:-n/, which stands for 'belonging to the Kharia tribe' in Kurux, is represented as /khaɽiya:-n/ in Kunha. /corh-ni:/ ~ /cor-ni:/ referring to 'lady thief' in Kurux is represented as /cor-ni:/ in Kunha.

- Kurux form /na:mukil ka:l-a:/ 'to deny; to oppose' where metathesis cluster changes from /il/ to /li/ in Kunha /na:mukli: ka:l-a:/.

- Kurux form /biya:ri:/ 'wee hours' > /pairi:/ in Kunha, where the VC sequence /ia:/ becomes /ai/.

Metathesis involving vowel /e/ and consonant sounds alters the phonetic structure of words when transitioning between different dialects within the same language family, reflecting the dynamic nature of linguistic variation.

- DEDR 789 /eɽetʰ/ > /iɽtu:/ (long-bow) - Kurux form includes the sequence /etʰ/. However, in Kunha, metathesis has occurred, resulting in the sequence /tu:/ from /etʰ/ in /iɽtu:/.
- /keber mo:x-a:/ > /kebra mo:h-ã:/ 'to be scolded' - the Kurux form features the sequence /e/ followed by /r/. In Kunha, metathesis has led to the rearrangement of sounds, with the sequence /er/ becoming /ra/.
- /xe:xel/ > /he:hla/ 'land, earth' - Kurux form contains the sequence /e:x/. In Kunha, metathesis results in the sequence /he:/.
- /endra:/ > /ende:r/ 'what, why' – Kurux form includes the sequence /en/. In Kunha, metathesis causes the sequence /ne/.

An instance of metathesis involves vowel /o/, such as DEDR 3520 /tolokh/ 'side of the body, and armpit' in Kurux changes to /tolkʰo:/ in Kunha. The result of metathesis [okʰ] > [kʰo:] indicates the phonetic representation after the change. Aspirated sounds are involved in a similar CV transposition process with sound segments.

Krishnamurti (2003) shows that the transposition of an apical consonant from the coda of the first syllable to its onset is a defining isogloss for the South-Central subgroup. This process has gained ground in Kuvi, for example, /gɽu:-/ 'knock against something', /dɽova/ 'basket', /kɳupa/ 'berry of a tree'. Some verbs alternate between metathesised and non-metathesised stems in their conjugation, for example, /pa:ŋ-/ ~ /pɳaʔ-/ 'receive', /pe:r-/ ~ /preʔ-/ 'chase', and certain nouns have a metathesised stem in the plural, for example, /ɖo:ri/ 'rope' ~ /ɖro:-ka/ 'ropes, /pe:ɳu/ 'louse' ~ /pɳe:-ka/ 'lice' (note the retroflex nasal in the plural). While Telugu has subsequently simplified clusters thus generated, for example, /vra:yu/ 'write' (< /*varia/ 'draw') has become /ra:yu/ 'write', Kuvi retains its initial clusters (Steever, 2019). Dravidian languages of the South-Central group have innovated, to a greater or lesser extent, a rule of Metathesis or Apical Displacement (see Krishnamurti 1961 & 1978), which now permits resonants and laterals to appear word-initially, as in Telugu /ra:yu/ ~ /wra:yu/ 'write' from /*varay/ 'draw, make lines' (DEDR 5263), Kui /la:venju/ 'youth' and Gondi /leyyoR/ 'id' from /*iɭay-anṯu/ 'young man' (DEDR 513). A comprehensive overview of Dravidian languages by Steever (2019) touches on metathesis patterns, providing insights into how these languages exhibit unique metathetic processes and their significance within the Dravidian language family. Internal changes in many languages have also created initial clusters, so that metathesis changed /*varay/ 'write, draw' into Telugu /vra:yu/ 'id'; however, the subsequent development of this Telugu form into /ra:yu/ 'id' indicates that the PDr (Proto-Dravidian) prohibition against initial clusters was still operative at some level.

There is hardly any instance of compressing two syllables into one. The general patterns in the Kunha language show that two segments are transposed, keeping the syllable structures intact, and metathesis segments do not transpose. However, the second syllables in disyllable words tend to end with a vowel. For example: [na.kar nu.kur] 'tottering' resyllabifies into [na.kru nu.kru] and so do in other examples [na.lakʰ] 'work, duty' > [nal.kʰu], [ma.rag] 'horn, antler' > [mar.gu]. Metathesis under transposition is, therefore, expected to be phonetically perfect, thereby maintaining the language's coda-onset sequence.

Kurux	Kunha	Meaning	Metathesis
/nakar-nukur/	> [nu.kra-nu.kru]	'tottering'	[ar] > [ra] [ur] > [ru]
/nalakʰ/	> [nal.kʰu]	'work, duty'	[akʰ] > [kʰu]
/marag/	> [mar.gu:]	'horn, antler'	[ag] > [gu:]

Reordering of CC sequence is distinctively realised in the Kunha language, which is rarely found in other Dravidian languages, e.g. [kc] > [sk], [ɽm] > [mɽ], [rd] > [ɖr], [sp] > [hp], [sʈ] > [ɽs]; however, there is an explicit change in the syllabification of sound segments, for examples:

Kurux	Kunha	Meaning	Syllabification
/ma:k.cu:ɳɖ/ >	[ma:s.ku:ɽ]	'name of a flower'	/σσ/ → [σσ]
/hoɽm-baʔ-a:/ >	[hom.ɽa-ba-a:]	'to throw one down headlong'	/σσ/ → [σσ]
/xarɖ.ka:/ >	[haɖr.ka:]	'stolen'	/σσ/ → [σσ]
/lap.sa:rʔ-a:/ >	[lah.pa:r-a:]	'to take long strides'	/σσ/ → [σσ]
/õ:saɽ.go:/ >	[õ:ɽs.ka:]	'a kind of mushroom'	/σσ/ → [σσ]

The transposition of CVC structures in the Kunha language presents an interesting phenomenon of

metathesis, and these changes involve aspirated sounds, e.g. [palx] > [pʰal], [balx] > [bʰal], [gucʰ] > [gʰuc], [letʰ] > [tʰep], are the cases of reversal in consonant. Metathesised sequences are uniformly treated as matching their underlying precedence order and keeping the numbers of syllables intact.

Factors Influencing Metathesis in Language Variation

Phonological Environment

Metathesis in language variation could be accounted for by the phonological environments, such as phonetic contexts or structural conditions, which may assist or obstruct the metathesis between Kurux and Kunha language variations. It is likely that a particular sound, such as vowel sounds [a, e, i, o, u] or sound sequences [kc], [letʰ], [ɽm], etc., are prone to reordering due to articulatory ease or perceptual salience in a specific phonological environment. Phonological features such as vowel harmony or consonant cause the likely occurrence of metathesis as they create conditions conducive to sound rearrangement. Language variations in phonological patterns, such as differences in vowel or consonant inventories, syllable structures, or stress patterns, can lead to differences in the prevalence or patterns of metathesis across different language variations. Due to unique phonological characteristics or historical developments, certain speech variations may exhibit more frequent or regular metathesis phenomena.

Geographical Location

Languages spoken in regions with diverse linguistic communities, such as Odia, Hindi/Sadri, Munda, and Kharia, exhibit metathesis influenced by language contact. If neighbouring languages or dialects have metathesis patterns, speakers may adopt or adapt these through language contact. Geographically isolated dialects can preserve archaic linguistic features, including metathesis patterns, that have been lost or changed in surrounding dialects. Therefore, language varieties in isolated regions may exhibit unique metathesis phenomena that reflect historical linguistic developments. Physical barriers such as mountains, rivers, or valleys can restrict communication and interaction between different communities, leading to distinct dialects with their metathesis patterns. Geographic features can thus contribute to the divergence of metathesis phenomena across regions. Historical migration and settlement patterns can spread specific dialectal features, including metathesis, to new geographic areas. Dialects spoken by communities that have migrated from different regions may exhibit metathesis patterns characteristic of their ancestral dialects.

Cultural Influences

The analysis of metathesis in the Kunha language highlights the profound influence of cultural factors on phonological processes and language evolution. The Kunha people's unique cultural practices, beliefs, and social interactions have significantly contributed to the occurrence and prevalence of metathesis within their language. Cultural practices and beliefs often shape how individuals produce and perceive speech sounds. In the case of the Kunha language, cultural practices related to storytelling, music, and oral traditions might have influenced the phonetic patterns and the occurrence of metathesis. Additionally, social interactions and cultural exchanges with neighbouring communities could have introduced new phonological features and influenced the adoption and spread of metathesis within the Kunha language.

Sociolinguistic changes evident in Kunha can be associated with the urbanisation and industrialisation of the Kunha-speaking regions of western Odisha. Urbanisation has paved the way for linguistic changes among tribal language speakers. The culture of Kunha speakers has also changed with time. Major religions like Christianity and Hinduism drive it by adopting religious rituals and tribal ceremonies (for a detailed overview, see Kujur, 2021, 143). A few cultural aspects of Kurux/Oraon still exist in Kunha, but several linguistic differences between the languages have developed. The Kunha culture is dynamic and influenced by language contact and external influence from dominant and minor languages. Therefore, further research in Odisha's Kunha language will reveal complex language contact features, cultural evolution, and sociolinguistic composition. Kunha has been undergoing a linguistic process of Aryanization in Odisha that is majorly influenced by Indo-Aryan languages.

There has been extensive language contact between the speakers of Kunha and those of Indo-Aryan and Munda languages in Odisha. Consequently, the loanwords in Kunha are borrowed majorly from Odia, Hindi/Sadri, and

minorly from Munda and Kharia. Kunha also exhibits some remnants of the Kurux/Oraon language; however, prolonged interactions with several languages and religions have shaped the significantly distinct linguistic landscape of Kunha culture. Interaction with Hindi-Sadri and Christian missionaries significantly influences the gradual shift to the major language family in the region.

V. CONCLUSION

Over the centuries, each linguistic community has developed its peculiarities concerning specific image components and special traits. Studying metathesis in the Kunha language provides valuable insights into languages' evolution and phonological processes. The study contributes significantly to linguistic typology by exploring morphological and phonological changes, this research sheds light on the mechanisms of linguistic change over time. The findings suggest that language variation and contact play significant roles in phonological adaptation, contributing to the dynamic nature of language development. Historical linguistics studies like this are crucial for understanding the intricate processes that shape languages and their evolution. Further research in this area can deepen our understanding of the complexities of linguistic change and its implications for language typology and contact-induced language change. The speakers of Kunha are continuously working to develop the language and restrict the use of the term Kisan; however, it will pose a great challenge to the people as many have adopted Kisan as their clan's name instead of the original clan's name.

There are sociolinguistic motivations behind reordering CV or VC, CC and CVC sequences, such as phonological, geographic and cultural influences. The codas of the first syllable in the pre-metathesised sequence occupy the onset position of the second syllables in the CV or VC, and CC sequences. These patterns from Kunha language confirm the cross-linguistic tendencies for metathesis discussed in Hume (2004): (i) metathesis involves adjacent segments, and (ii) ordering reversals are preferred at the end of stems and words because word position and proximity constitute significant factors for speech processing (Mielke & Hume, 2001). As such, this experience will remain in the history of linguistics and enhance language documentation for a very long time, providing a resource for comparative studies within the language family.

CREDIT AUTHOR STATEMENT

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DECLARATION OF COMPETING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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