DISTRIBUTION AND ALTERNATION PHENOMENON IN NGENO-NGENE DIALECT

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Abstract

This research was conducted in East Lombok, West Nusa Tenggara, exactly in Masbagik capital village. The researcher was born and used the Sasak language in all her life. This research focuses on two variable objects such as distribution and alternation phenomenon. It was about some vowels which were similar to other languages such as vowels ɑ, i, u, ɛ, and o. This research showed some variants from vowels and consonants such as linguistic classifications and introduced the phenomena of vowel distribution sequence and consonant distribution.

The researcher used of Salka and Tsaqilla to this research because they use distribution and alternation phenomena in their language also. Salka focused on phonological process by using Bosowalikan in Javanesse and Tsaqilla with a study on phonology of Indonesian spoken by sasak speakers.

This research used collection of the data, identification of the data, clasification of the data, and analysis of the data as a method in identification of research problem.

Theoretical concept this research use generative phonology, distribution and alternation. Then theoretical framework use distribution, alternation, phonological rule and phonological process.

Research method and design the researcher used descriptive qualitative for this research which facilitated the procedure of direct research by explaining the investigated problem and obtained data from environment. Then, it was analyzed and interpreted by giving conclusion. The research variables of this research has two variables: distribution and alternation. Population and sampling technique the researcher used only 15-20 Masbagik people as a sample with standard of productive age between 15-64. The reason was to take the small population because the researcher assumed that all of Masbagik people had similar utterances in a word until small population that could be representative of big population.

Technique and collecting data the researcher collected the data from family, school, and environment. In this research, the researcher used observation and a direct data collection with recording by using the researcher’s mobile before selecting the data. Data analysis procedure the researcher made a phonetic transcription list, the researcher classified vowel and consonant and determined sound, appropriate utterance for transcribing the sounds. For vowel, the researcher classified short vowel and long vowel. Then, the researcher determined some consonants with same pronunciation like ‘k’ and ‘ʔ’ sounds but different which both has similar sound.

The researcher found that consonant cluster in Ngeno-ngene dialect had minimal CC and maximal consonant CCC in a word on consonant cluster some words in Ngeno-ngene dialect had nasal which was not mentioned with nasal consonant cluster although nasal appeared adjacent with a consonant because on this case Sasak Masbagik did not allow nasal to adjoin with consonant until common nasal was separated by syllable and called by nasal homorganic.

In vowel distribution researcher found vowel ‘ɑ’ follow (r, l, p, s, ɔ, o, ɛ, w) and vowel ‘ɐ’ follow (b, s, n, k, m, ʔ) they call a phonemes. The researcher found that vowel ‘i’ was phoneme because wider distribution appear on all positions while it’s variant was an allophone. Found that vowel ‘u’ is phoneme because has wider distribution and ‘ʊ’ limited distribution. Vowels ‘ɛ’ and ‘æ’ appear on all positions are word initial, medial and final positions they are phonemes on
their distribution. Vowel ‘o’ and ‘ɔ’ are phonemes because they have wider distributions appearing in all positions.

In consonant distribution the researcher showed liquid distribution ‘l’ and ‘r’ which they are phonemes in their distribution. Glottal stop and velar distribution the velar (k) can appear on all positions while glottal (ʔ) just can appear on final. Nasal distribution η, n, m, n they are phonemes in their distribution.

Alternation the researcher found nasal alternation, nasal assimilation, consonant deletion, geminate deletion, pa prefix, voiceless obstruent fusion, glides insertion, consonant epenthesis, ba and bar prefix.

**Key words:** Distribution, Alternation and Dialect

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**PENOMENA DISTRIBUTI DAN ALTERNASI DALAM DIALEK NGENO-NGENE**

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**Abstrak**

Artikel ini datang dari lombok timur provinsi nusa tenggara barat tepatnya di desa masbagik. Penelitian ini focus pada dua objek yaitu pada penomena distribusi dan alternasi.

Penelitian ini meneliti vocal yang digunakan seperti pada bahasa lainnya seperti a, i, u, ɛ, dan o. Penelitian ini menunjukkan varian yang muncul pada distribusi vocal maupun konsonan serta memperkenalkan rangkaian vocal dan konsonan pada distribusi.


Penerfik peneliti menggunakan distribusi, alternasi, aturan ponolgy dan proses ponology.

Untuk metode dan disain dalam penelitian ini menggunakan deskriptive kualitatif dimana penelitian ini diambil secara langsung dari lingkungan. Sehingga penelitian ini memiliki dua variabel yaitu distribusi dan alternasi.

Untuk populasi dan sampel pada penelitian ini menggunakan 15-20 orang dengan standar produktif umur yaitu 15-64 tahun alasan pengambilan sampel ini karena bahasa masbagik itu memiliki dialek yang orang masbagik semua menggunakan sehingga sedikit sampel ini sudah bisa mewakili keseluruhan sampel yang ada.

Untuk tehnik pengambilan data peneliti disini mengambil data dari keluarga, sekolah, dan lingkungan. Peneletian ini menggunakan obserfasi dan mengkoleksi data secara langsung dengan menggunakan handphone.

Prosedur dalam menganalisi data peneliti menggunakan transkrip ponetik yang mana peneliti mengklasifikasikan vocal, konsonan, bunyi dan ucapan yang tepat untuk mentranskripkan bunyi. Untuk vokal diklasifikasikan mencadi vocal yang di baca panjang dan pendek. Sedangkan konsonant dengan mengenali perbedaan bacaan ‘k’ dan ‘ʔ’.

Untuk bab yang membahas hasil penelitian disini di jelaskan bahwa vokal itu memiliki farian bunyi sedangkan pada konsonan di temukan labial, alveolar, palatal, velar dan glottal.

Penelitian ini juga menemukan konsonant kluster dimana ternyata dialek ini memiliki batasan konsonant pada kata yang digunakan yaitu minimal konsonant yang bisa muncul berdekan pada satu kata adalah CC dan maksimalnya adalah CCC.

Pada distribusi vokal diikuti oleh ‘a’ (r, l, p, s, ɔ, o, ɛ, w) dan vokal ‘i’ (b, s, ɲ, m, k, n, ?) mereka semua adalah poneme. Untuk vokal ‘i’ ditemukan poneme dan allopon yang mana voka ‘i’ sebagai poneme
dan ‘t’ sebagai fariannya. Sama dengan vokal ‘i’ vokal ‘u’ juga memiliki poneme dan allopon dimana vokal ‘u’ sebagai poneme dan ‘u’ fariannya. Untuk vokal \( e \), \( æ \), \( ø \) mereka bertiga adalah farian dan vokal ‘o’ bersama dengan fariannya adalah poneme.

Pada diatribusi konsonan ditunjukkan distribusi liquid ‘l’ dan ‘r’ dimana mereka berdua adalah poneme pada distribusi mereka. Pada distribusi glottal stop dan velar (k) bisa muncul pada semua posisi sedangkan glottal (?) hanya bisa muncul pada final. Pada distribusi nasal ŋ, n, m, n mereka adalah poneme pada lingkungan mereka.

Mengenai alternasi penelitian ini menemukan alternasi nasal, nasal assimilasi, penghilangan konsonan, penghancuran geminat, awalan po, voiceless obstruent fusion, penyisapan glides, consonant epenthesis, prefik bo and bor.

Kata kunci: Distribusi,Alternasi dan
Dialek \( ñøø \)-\( ñøø \)

Introduction

Indonesia is a country with ethnics and diversities which effect the diversity of language in this country. Therefore, in addition to Indonesian language as the national language, it has many vernaculars or local languages in almost every area of this country.

Lombok island or more familiar known as Sasak region or an island with one thousand mosques has some different utterances in every village. NTB is a province in Lombok which is also very famous with three ethnic groups and this region has different languages: Sasak, Samawa and Mbojo. Lombok island has five regencies such as West Lombok, Central Lombok, East Lombok, North Lombok and Mataram city. Lombok island by using sasak language as a dialect has part of glossary such Meria-Meriku (South Lombok), meno-mene and \( ñøø \)-\( ñøø \) (Central and East Lombok), \( ñøø \)-\( ñøø \) (Southeast Lombok), and Kuto-Kete (North Lombok) (wikipedia Indonesia).

This research was conducted in East Lombok, West Nusa Tenggara, exactly in Masbagik capital village. The researcher was born and used the Sasak language in all her life. Masbagik language always use \( ð \) spoken in their utterance during the conversation but the researcher does not discuss about that in as much as this research focuses on two variable objects such as distribution and alternation phenomenon. Sasak people sometimes use \( ñøø \)-\( ñøø \) and meno-mene in several villages located in Lombok island.

\( ñøø \)-\( ñøø \) dialect is usually used in East Lombok such as Sakra, Sikur, Terara, Keruak, Jerowaru, and Selong subdistrict, while \( ñøø \)-\( ñøø \) is used in Masbagik, Pringgabaya, and Pohgading subdistrict. \( ñøø \)-\( ñøø \) dialect means that ‘’\( ñøø \)-thus’’ and ‘’\( ñøø \)-like that’’ same like ‘’\( ñøø \)-thus’’ and ‘’\( ñøø \)-like that’’. Therefore, Sasak language has different dialects but has the same meaning.

In addition, the researcher used Willian’s research as an orientation in this research. Next, the researcher showed a table containing some dialects using Sasak language adopted from Dr.Sudirman Willian.

(1) The table of some dialects on Sasak Language

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Dialect</th>
<th>Region use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pejanggik</td>
<td>( ñøø )-( ñøø ) dialect</td>
<td>West Lombok, Central Lombok and East Lombok</td>
</tr>
<tr>
<td>2</td>
<td>Selaparan</td>
<td>( ñøø )-( ñøø ) dialect</td>
<td>East Lombok</td>
</tr>
</tbody>
</table>

(Adopted from Dr. Sudirman Willian)
He classified the dialects according to his research by using Pujut (məɾιʔ - məɾiku dialect) dialect used in south regions including Pujut, West Praya, North West Praya, and some in East Praya until Jerowaru (East Lombok). In part of Central Lombok island this dialect is used by the people in Jonggat sub-district (Central Lombok).

It is also found between in the middle of Pejanggik dialect in Selaparang, such as Pademare village and Denggen village East Lombok regency. Then, the Bayan dialect is used in North Lombok including Pemenang, Tanjung, Gangga and North Lombok regency.

The East Lombok dialect such as Sembalun, Obel-obel, Wanasaba and Suralaga by using Selaparang dialect is ŋəno-ŋəne dialect.

This research focused on ŋəno-ngophone dialect. It was about some vowels which were similar to other languages such as vowels а, i, u, ε, and o. The researcher’s assumption was that Masbagik’s vowel not only consists of five vowels but also more because the researcher found that vowel ‘а’, for example, would hear two sounds such as long and short vowel when pronounced ‘а oʔ and а mboʔ. We are able to know both with the identification appearing location by using vowel distribution. This case became a reason for the researcher’s in analyzing vowel distribution on ŋəno-ŋəne dialect.

Phonology is the subfield of linguistics that studies about the structure and systematic pattering of sounds in human language with investigation of how speech sounds are produced on articulation in the vocal tract. It usually refers to the abstract rules and principles that govern the distribution of sounds in a language. Akmajian, (2001, p:66).

Then, phonetics usually refers to the study of the articulatory and acoustic properties of sound, it is the study of speech sounds Akmajian, (2001,p:66).

In addition, Odden (2005, p:38) said that “Phonology is one of the core fields that composes the discipline of linguistics”. It means the Odden’s theory on phonology is central area which consists of linguistic arrangements.

According to Fromkin, (2010,p:201) .” The differences among the sound pattern of the world languages are so great that no general notion of “difficulty of articulation” can fully explain all of the phonological facts about a particular language”. This Fromklin’s theory explains about sound patterns of general language in the world and supposition because difficult articulation can explain all of phonology evidence about a particular language.

Phoneme is a language unit which represents language sounds. According to Jones (1987,p:10), phoneme is a part of sounds in a language specification which has relation with character and the use with special method where there is no similarity between phonetic and another.
Then, according to Conor, Vocal on a phoneme is sound occurring because of air passing through different mouth size “Vowel are made air passing through different mouth shapes, the differences in the shapes of the mouth are caused by different position of the tongue and the lips” Connor, (1995,p:35).

O’Grady (1996,p:136) states that there are three parts of phonetics according to sound production by human, they are:

a. **Articulatory phonetics**: it explains that sounds production method is according to tongue and lips location. Small or large are open lips giving effect on vocal vibration or not.
b. **Acoustic phonetic**: it explains that deliverance of sounds through air which a sound utterance occur air minority such sound swell.
c. **Auditory phonetic**: it explains that acceptance of sound language is resulted by native speaker.

The researcher was introduced the appropriate terminology. The first question relating to function is the distribution of the sounds those positions in which it can occur. The second aspect of function derives from distribution.

This research showed some variants from vowels and consonants such as linguistic classifications and introduced the phenomena of vowel distribution sequence and consonant distribution. Then, the researcher also investigated some processes or phenomena correlating with the alternation phenomenon in the sounds systems of human languages.

According to Peng, (2013,p:15) identification sounds pattern in human language must look for uneven or asymmetric distributions. Uneven distribution means that phonological process get result indirectly although it has known result but look at two possible appearances because the researcher uses some assumptions to get real evidence.

The distribution is phonological phenomenon using the restrictions on vowel sequencing in ŋano-ŋano dialect roots as a data. The important of knowing the logically possible outcomes is that the researcher was able to know the patterns which exist because a pattern is an essential distortion from the even distribution of logically possible outcomes.

Then, alternation phenomena consisting of prefix and affix is phonology phenomena which each unit on a word has mean. In addition by Peng, (2013, p:97) the alternation is a type of phonological phenomenon in which a unit of meaning such as a root or prefix is alternate in pronunciation.

The researcher used of Salka and Tsaqilla to this research because they use distribution and alternation phenomena in their language also. Salka focused on phonological process by using Bosowalikan in Javanese and Tsaqilla with a study on phonology of Indonesian spoken by sasak speakers.

First, Salka’s research explained that the phonological process analyzed glottal stop phenomena, nasal process consisting of nasal assimilation, vowel nasalization and the last for nasal consonant effect consisting of voiceless obstruent fusion, metathesis and schwa insertion and consonant devoicing consisting of liquids devoicing, glides devoicing and obstruent devoicing. It was continued by schwa insertion, glides insertion and rule insertion.

Second, Tsaqilla’s research showed that the distribution of Indonesian nasal deviding into four parts are distribution of Indonesian nasal in a word, types of nasal consonant cluster allowed in Indonensia, Indonesia
distribution of stops, and distribution of vowels in Indonesian. Phonological process consists of nasal process dividing into two parts are nasal assimilation and nasal deletion. Fusion consists of voiceless stop fusion, velar nasal and voiceless alveolar fricative fusion and the last voiceless obstruent fusion. Schwa insertion consists of vowel nasalization, final obstruent devoicing and glide deletion. Glottal stop phenomena consists of glottal stop velarization and glottal stop insertion.

The researcher was interested in reviewing this research on sasak masbagik because it had not been investigated this phenomena yet in Sasak language especially in ɲəŋ-ɲəŋ dialect.

Method

The researcher used descriptive qualitative for this research which facilitated the procedure of direct research by explaining the investigated problem and obtained data from environment. Then, it was analyzed and interpreted by giving conclusion.

Descriptive qualitative is a method in this research. Its main method of data collection is tightly related to recording, selecting the data, writing the data, analyzing and resulting. The researcher explain and describe the data which is displayed in the form of field-notes.

According to Strauss and Corbin (1990), through qualitative research we can study about phenomenon which often could not be explained through quantitative method.

In qualitative research, the data is natural setting, primer source of data, participant observation, in depth interview and by documentation. The fundamental methods relied on by qualitative researchers for gathering information is participant in the setting, direct observation, in depth interviewing and document review.

The design applied as an approach to identify and describe the phenomena happening in nature setting. Beside that the researcher has also a native speaker of Sasak and another sample to take the data from Husni Muadz’s student assignments. The researcher recorded the conversation before selecting the data, writing on the data, analyzing the data and getting the result.

According to central statistic institute in Lombok Timur, if it is in line with inhabitant denseness, it is big population from some villages in East Lombok with 2,985 soul/km². Masbagik had many inhabitants in sub district in 2005 and increased up to 99,029/8,51% in 2006 year. The researcher did not take all population in Masbagik but the researcher selected the population according to productive and non productive age of Masbagik people that were between 15-64 years old with degree 65, 039% as productive people. Masbagik village has clasification according to each locations such as Kesik, Paok Motong, South Masbagik, East Masbagik, North Masbagik, Danger, Lendang Nangka, New North Masbagik, North Lendang Nangka, Kumbung. Each villages has some gender variations such as the data from statistic institute that the researcher described with the data. Source: inhabitant projection

After the researcher analyzed the data above, the researcher used only 15-20 Masbagik people as a sample with standard of productive age between 15-64. The reason was to take the small population because the researcher assumed that all of Masbagik people had similar utterances in a word until small population that could be representative of big population.
Creswell (2012: 142) states that for target population, the researchers then select a sample for study. A sample is a subgroup of the target population that the researcher plans a method for generalizing the target population.

The steps of data analysis above is elaborated as follows:

**3.5.1 Identifying The Distribution types, Alternation types, and phonological processes**

In this process, the researcher identified the distribution types and alternation types which is usually used in spoken language of Masbagik people.

**3.5.2 Classifying The Distribution types, Alternation types and phonological processes which will be used in the spoken language of Masbagik people (Cross checking)**

In this step, the researcher classified the distribution types such as (complementary distribution, allomorph distribution and allophone distribution) and alternation types (phoneme alternations, underlying representation, feature of sounds) used in the spoken language of Masbagik people. The researcher determined which one belongs to the distribution types and alternation types.

**3.5.3 Defining and describing The Distribution types, Alternation types and phonological processes**

In this step, the researcher obtained data by defining and describing one by one to give more understanding to the readers about the use of distributions and alternations in spoken language of Masbagik Sasak people.

**3.5.4 Presenting the data**

Selecting the data based on the data classification would be then presented in line with research problems, including the temporary conclusion which is obtained in data reduction.

**3.5.5 Concluding the Findings and evaluation**

In this step to find the patterns, it is a possible configuration or the researcher proportion. The conclusion would be verified during the research to see the use of distribution and alternation in spoken language of Masbagik-Sasak people.

**Finding & Discussion**

The researcher found some processes on distribution and alternation phenomenon. The researcher intended to introduce some phenomena and process in the study of phonology which the researcher took a sample from Sasak Masbagik with ԡประสง dialect.

The goal of this research was to develop readers’ ability to analyze their sound patterns in the natural language. The research used some methods from Peng’s book that the writer introduced how to analyze, to observe, to identify and to describe pattern, with hypotheses and construct analyze, compare and evaluate hypotheses, the use of linguistic argument and the conclusion of the analysis.

This research consists of two phenomena such as:

1. Distribution phenomenon
2. Alternation phenomenon

For distribution the researcher analyzed vowel distribution and the researcher found phoneme and allophone to appear in their environment. Whereas, the consonant
distribution the researcher found liquid distribution, glottal stop and velar distribution and than nasal distribution.

For alternation the researcher found nasal assimilation, consonant deletion, geminate deletion,ₚₒ prefix alternation, voiceless obstruent fusion, bₒ and bₓr prefixes and schwa insertion.

The researcher identified sound which is consist of vowels and consonants identify.

The researcher found the sum of vowel identification in ƞጾ-ƞጾ dialect including their variants. Actually ƞጾ-ƞጾ dialect has five vowels (a, i, u, e, o) like another languages but after the researcher analysis with IPA phone the researcher found their variants such (Λ, ㅏ, ㅗ, ㄘ, ㄩ, ㄢ). The researcher maked a conclusion that there were eleven vowels used in ƞጾ-ƞጾ dialect including variants. Whereas, the consonant identification the researcher is found labial (p, b, m), alveolar (d, t, s, n, l, r), palatal (c, j, ɲ), velar (g, k, ɲ, n, and w) and glottal (?) and h).

This research showed some phonological processes in ƞጾ-ƞጾ dialect such as nasal assimilation, consonant deletion, geminate deletion, voiceless obstruent fusion and schwa insertion.

For establishing rule the researcher applied two rules: rule approach and templatic approach. Rule approach focused on skeletal unit that was one syllable, while templatic approach focused on two syllables and syllable structure until resulting nasal homorganic. And this research showed process of syllabification on vowel and consonant distribution. On this process the researcher found phoneme and allophone appearing on their environment as well as another environment and the researcher found maximal syllabic also which has combination CCCVC.

The researcher prepared the research which result completed with the data. The researcher started to analyze the data with sound identification by explaining distribution and alternation phenomena.

This table illustrates the vowel present (UR= unrounded) and (R= rounded) on appropriate ƞጾ-ƞጾ dialect tongue positions.

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>u</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td>ə</td>
<td>o</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ʌ</td>
<td>ɔ</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>æ</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>


Long vowels: i:, u:, ə :, ɑ :, and ə :

Short vowels : i , e , ʊ , ə , ʌ , ɔ and æ

The descriptions of articulatory grid vowels by use Masbagik people

<table>
<thead>
<tr>
<th>Vowel descriptions</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel /a/ : the</td>
<td>[a oʔ ] ‘yes’</td>
</tr>
<tr>
<td>Vowel/ʌ/ : the</td>
<td>[ʌ mpoʔ ]</td>
</tr>
</tbody>
</table>
The following is a list of consonants of Sasak Masbagik language:

- **[p]** : voiceless bilabial stop
- **[pa ηkə t]** : ‘rice field’
- **[m]** : voiced bilabial nasal
- **[ma ηn]** : ‘eat’
- **[t]** : voiceless alveolar stop
- **[tɔ kɾ ʔ ]** : ‘pinch’
- **[d]** : voiced alveolar stop
- **[daɾ t]** : ‘meet’
- **[s]** : voiceless alveolar fricative
- **[sæt ʔ ]** : ‘one’
- **[n]** : voiced alveolar nasal
- **[niːy p]** : ‘blow’
- **[l]** : voiced alveolar liquid
- **[liːw t]** : ‘by way’
- **[r]** : voiced alveolar liquid
- **[riːbʊ t]** : ‘noisy’
- **[c]** : voiceless palatal affricates
- **[cə lə ɲ]** : ‘dishonest’
- **[ʃ]** : voiced palatal affricates
- **[ʃækʊ ʔ ]** : ‘bring’
- **[ɲ]** : voiced palatal glide
- **[ɲowæŋ]** : ‘screamed’
- **[k]** : voiceless velar stop
- **[kaɾisæ]** : ‘renovation’
- **[g]** : voiced velar stop
- **[gə də h]** : ‘gold brown’
- **[ŋ]** : voiced velar nasal
- **[ŋkəɾ]** : ‘water big down’
- **[w]** : voiced velar glide
- **[waɾ h]** : ‘finish’
- **[ʔ]** : glottal stop
- **[a oʔ]** : ‘OK’

<table>
<thead>
<tr>
<th>Vowel /i/ : the features are</th>
<th>[iːdʊ]</th>
<th>‘life’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel /ɪ/ : the features are</td>
<td>[ɪntɛ]</td>
<td>‘spying’</td>
</tr>
<tr>
<td>Vowel /u/ : the features are</td>
<td>[uːlɛʔ]</td>
<td>‘go home’</td>
</tr>
<tr>
<td>Vowel /ʊ/ : the features are</td>
<td>[nʊndok]</td>
<td>‘bent down’</td>
</tr>
<tr>
<td>Vowel /ɛ/ : the features are</td>
<td>[ɛlʌʔ]</td>
<td>‘tongue’</td>
</tr>
<tr>
<td>Vowel /æ/ : the features are</td>
<td>[ælʊŋ]</td>
<td>‘water’</td>
</tr>
<tr>
<td>Vowel /ə/ : the features are</td>
<td>[cələɲ]</td>
<td>‘dishonest’</td>
</tr>
<tr>
<td>Vowel /ɔ/ : the features are</td>
<td>[ɡowæ]</td>
<td>‘stupid’</td>
</tr>
<tr>
<td>Vowel /ɹ/ : the features are</td>
<td>[ʃækʊ ʔ]</td>
<td>‘bring’</td>
</tr>
<tr>
<td>Vowel /a/ : the features are</td>
<td>[ɲowæŋ]</td>
<td>‘screamed’</td>
</tr>
<tr>
<td>Vowel /ɻ/ : the features are</td>
<td>[kaɾisæ]</td>
<td>‘renovation’</td>
</tr>
<tr>
<td>Vowel /ɔ/ : the features are</td>
<td>[ɡədəh]</td>
<td>‘gold brown’</td>
</tr>
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<td>Vowel /ɚ/ : the features are</td>
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<td>‘water big down’</td>
</tr>
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<td>[ʃækʊ ʔ]</td>
<td>‘bring’</td>
</tr>
<tr>
<td>Vowel /ɜ/ : the features are</td>
<td>[ɲowæŋ]</td>
<td>‘screamed’</td>
</tr>
<tr>
<td>Vowel /ɔ/ : the features are</td>
<td>[kaɾisæ]</td>
<td>‘renovation’</td>
</tr>
<tr>
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<td>[ɡədəh]</td>
<td>‘gold brown’</td>
</tr>
<tr>
<td>Vowel /a/ : the features are</td>
<td>[ŋkəɾ]</td>
<td>‘water big down’</td>
</tr>
<tr>
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<td>‘stupid’</td>
</tr>
<tr>
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<td>[cələɲ]</td>
<td>‘dishonest’</td>
</tr>
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</tr>
<tr>
<td>[h]</td>
<td>voiceless glottal fricative</td>
<td></td>
</tr>
<tr>
<td>[sǝ doh]</td>
<td>‘pour boiling water’</td>
<td></td>
</tr>
</tbody>
</table>

The following are consonants of ŋəno-ŋə dialect with their articulation based on the place of articulation:

1. **Labial**
   Labial sounds in ŋəno-ŋə dialect are [p], [b] and [m].

2. **Alveolar**
   Alveolar sounds in ŋəno-ŋə dialect are [d], [t], [s], [n], [l] and [r].

3. **Palatal**
   Palatal sounds in ŋəno-ŋə dialect are [c], [j] and [ɲ].

4. **Velar**
   Velar sounds in ŋəno-ŋə dialect are [g], [k], [ŋ] and [w].

5. **Glottal**
   Glottal sounds in ŋəno-ŋə dialect is [ʔ] and [h].

**The following is a list of consonants of Sasak Masbagik language:**

| [p] | voiceless bilabial stop |
| [pə nə k] | ‘beat’ |

| [b] | voiced bilabial stop |
| [bə ɲə t] | ‘rice field’ |

| [m] | voiced bilabial nasal |
| [mə ɲə n] | ‘eat’ |

| [t] | voiceless alveolar stop |
| [tə kɪʔ] | ‘pinch’ |

| [d] | voiced alveolar stop |
| [də t] | ‘meet’ |

| [s] | voiceless alveolar fricative |
| [sə t] | ‘one’ |

| [n] | voiced alveolar nasal |
| [nɪ:yu p] | ‘blow’ |

| [l] | voiced alveolar liquid |
| [lɪ:wə t] | ‘by way’ |

| [r] | voiced alveolar liquid |
| [rɪ:bo t] | ‘noisy’ |

| [c] | voiceless palatal affricates |
| [cə la ɲ] | ‘dishonest’ |

| [j] | voiced palatal affricates |
| [jæwəʔ] | ‘bring’ |

| [ŋ] | voiced palatal glide |
| [ŋ owəŋ] | ‘screamed’ |

| [k] | voiceless velar stop |
| [kə risə] | ‘renovation’ |

| [g] | voiced velar stop |
| [ɡə də ɲ] | ‘gold brown’ |

| [ŋ] | voiced velar nasal |
| [ŋkbəɾ] | ‘water big down’ |

| [w] | voiced velar glide |
| [wə h] | ‘finish’ |

| [ʔ] | glottal stop |
| [ɑ oʔ] | ‘OK’ |

| [h] | voiceless glottal fricative |
| [sə doh] | ‘pour boiling water’ |

**Syllable distribution**

5.2.1.1 *The puzzle*

<table>
<thead>
<tr>
<th>Type</th>
<th>initial</th>
<th>gloss</th>
<th>medial</th>
<th>gloss</th>
<th>final</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>ja : tə nhorse</td>
<td>bə .la</td>
<td>jə t study</td>
<td>pæ.yu:</td>
<td>so</td>
<td></td>
</tr>
<tr>
<td>CCV</td>
<td>crə .bə t</td>
<td>struggle</td>
<td>sə m.prə: spit on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVC</td>
<td>tə .ŋ.kə n</td>
<td>clothing</td>
<td>n.tə n.tæ a method</td>
<td>də .tə ɲ</td>
<td>come</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>a .oʔ</td>
<td>yes</td>
<td>sæ.i who</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CCVC  srə m. po ŋ lantern glass  ja ŋ kre k cricket

CCCVC  strʊ m electric

VC  a m. poʔ again  pæ. t bitter

C  n. tə n manner

VCV  æwu-æwu rice charcoal

5.2.1.2 Determining the maximal syllable in ŋəno-ŋəne dialect

Linguistics use four terms to describe the internal organization of a syllable are onset (O), rime (R), nucleus (N) and last coda (C). (Peng.2013.p.195)

From the data above the researcher took an example in ŋəno-ŋəne dialect. There are four syllables by the sequences (CCVC) for example on srə m. po ŋ word.

The data above showed that there are two syllables from type (CCVC) syllable in ŋəno-ŋəne dialect. It seems rather obvious that the Masbagik syllable include four segments.

The syllable represented by the Greek symbol sigma σ has two parts: onset and rime. The onset refers to the consonant preceeding the rime in a syllable. The rime is composed of two units: nucleus and coda. The nucleus refers to the vowel or vowels (long vowels or diphthong) which form the syllable peak. Until when a vowels is absent, a consonant can be a sonorant serving as the syllable nucleus. Consonants have function as the nucleus which referred to as syllable consonant because it has ability to serve as the syllable nucleus. The coda refers to the consonant following the vocalic nucleus. Some theories recognize onset, rime, nucleus and coda as the units within a syllable. (Peng:2013.p.196)

5.2.1.3 Identifying the restrictions on syllable-internal units

The researcher started identifying the restriction from the onset, rime, nucleous and coda.

Onset requirements:

a. Onset is optional
b. Onset can have at one or more consonants.

Rime requirements:

a. Rime has a minimum of one segment V or C (if a vowel nucleus is missing) and rime is made up of at most two segments VV or VC.

Nucleus requirments:

a. The nucleus is obligatory
b. The nucleus can be composed of a short vowel, a long vowel or a consonant. Nuclei with diphthong is prohibited.
c. The nucleus composed of a syllable consonant is allowed under two conditions. First, it is word–initial, and second the consonant must be nasal homorganic with the following consonant.
Coda requirements:

a. The coda is optional
b. The coda if it includes maximally one consonant.

5.2.1.3.1 Two approaches to syllable construction

The researcher used two approaches such on Peng’s book when the researcher analyzed syllable in Ponapean language. The researcher used this goal because Ponapean language had similarity with ṇəno-ŋəne dialect. They had similar maximal and minimal syllable in a word. The first rule was used in Ponapean language such the rule approach and second tempaltic approach use. And the researcher used two approaches like Ponapean to get simple rule because it can be clear to explain the data.

5.2.1.3.1.1 The rule approach

✓ The internal structure of a syllabic according to (Peng.2013.p.201)

Syllable
Sub-syllable units
Skeletel/timing units
Melodic tier

According to the (5.2.1.3.1.1) the syllable structures are constructed on the skeletal units composed of a string of C’s and V’s. For consonant and vowel melodies C’s and V’s indicate slot reserved, the use of the capaitalized C’s and V’s refer to skeletal units. While, the segment melodies linked to these skeletal slots are marked by the lowerease letters at the melodic tier to distinguish them from the skeletal units. Usually, the lowerease v representes some melody vowels such as i, u or a while the lower case c consonant melody such as p, m or l.

The requirment syllable is project a syllable σ from each V, adjoining a consonant to the immediate left of the rime as the onset of the following syllable σ, adjoining a consonant to the left of an onset to this onset, and adjoining a consonant to the right of a rime to this rime.

✓ Input to the syllabification rules

Project syllables:

a. Project a syllable σ from each V.

b. Adjoin a consonant to the immediate left of an onset of the following syllable σ.

c. Adjoin a consonant to the left of an onset to this onset.

d. Adjoin a consonant to the right of a rime to this rime.

Project syllables:

a. Project a syllable σ from each V.

b. Adjoin a consonant to the immediate left of an onset of the following syllable σ.

c. Adjoin a consonant to the left of an onset to this onset.

d. Adjoin a consonant to the right of a rime to this rime.
d. Adjoin a consonant to the right of a rime to this rime.

Before the researcher continued to get the appropriate result on all assumptions, the researcher used templatic approach and expected that this approach can answer of the researcher assumptions.

### 5.2.1.3.1.2 Templatic approach

The prosodic template approach also uses the Greek symbol σ to represent the syllable, but the syllable-internal units are marked by the Greek letter μ referred to as ‘mora’ in phonological literature.

In the Moraic theory vowels are moraic. It means that they occupy the positions specified by the mora with each mora allowing one and only one segment.

**Masbagik syllable template**

(a) \( \sigma \)  
(b) \( \sigma \)  

\( \mu \)  
\( \mu \)  

(c) \( v \)  
\( v / c \)  

\( (c) \)  
\( (c) \)  
\( (c) \)

(Picture :1)

**Note**: Moraic representations of nuclei composed of a short and long vowel in another case is nasal homorganic.

Nasal homorganic is a nasal adjoined with a consonant that has same place of articulation with nasal itself on a word which they can not be one syllable.

**Masbagik syllable template**

\( \eta \) dialect did not use double vowels or double consonants when they showed those long sound because Masbagik follows IPA symbol. Evidence was seen from vowel or consonant used in English language. Although, Masbagik was not similarity with another language but it had syllable template also. Next, the researcher showed Masbagik syllable template from example ‘srǝmpoŋ’ and ‘jʌŋkrɛk’ words which both were syllables that can appear on initial and final syllable.

(Picture:2)

According to Masbagik syllable above, the researcher found that nasal homorganic appearing in \( \eta \) dialect. Nasal homorganic appeared between consonant ‘m dan p’ which both had similarity in place of articulation that are bilabial. However, when nasal adjoined between some consonants and they had same places of articulation that was called nasal homorganic.

The another evidence about nasal homorganic in \( \eta \) dialect was that the researcher used nasal homorganic for example such as ‘jʌŋ.krɛk’ word which nasal adjoined
with consonant ‘k’ that has same places of articulation that is velar.

\[ \sigma \quad \sigma \]
\[ \mu \quad \mu \]
\[ j \text{ } \eta \quad k \text{ } r \quad \varepsilon \quad k \]

\((Picture:3)\)

Moraic formulas:

a. Projecting a mora from each vowel
b. Associating a consonant to the immediate left of a mora to this mora
c. Projecting a mora from any remaining consonant

d. Result of a mora from vowel, consonant and remaining consonant

\[ \sigma \quad \sigma \]
\[ \mu \quad \mu \]
\[ \eta \text{ } g \text{ } i \text{ } h \]

After the following of the project of mora, the researcher found in ŋəno-ŋəne dialect that nasal homorganic can independent to be a syllable when it appeared on an initial word.

The researcher was different from the rule approach because of two ways: first the templatic approach does not recognize the division between onset and rime. The adjoining of the onset to the initial mora of a syllable grouped the onset and the initial mora to one unit. Second, it does not recognize the rime onset as a unit because the two moras on a syllable are not grouped to one unit. Although two approaches had similarity and differences, but both approaches focus on a core CV syllable.

The rule approach is required that the two steps in project syllable apply first in the construction of syllable structures start from CVC. While in the templatic approach, syllabification is accomplished by the second step of moraic which adjoins as a consonant following mora. When syllable template project, this mora to the template creates the syllabification which consonant following vowel to be one syllable.

The similarity from these approaches are generate only syllabifications that are attested and illformed syllabifications that can never be generated because both approaches attempt to block syllabifications not allowed in a language. When the use of the rule approach can be blocked by universal conditions on a well formed syllable such as sequence, the restrictions on the segment is until the order the
sylabification rule apply. Template approach illformed syllabifications are blocked by the template, association to templates, by universal and language specific conditions.

The differences of these approaches are rule approaches focusing on skeletal units and templatic rule that focused on syllable structure directly on segmental melodies.

**Consonant cluster**

The consonant cluster is the two consonants that come closer on a word in ηono-ŋone dialect.

Ndə t ndə t ŋkʊ s nʊ tə mʊ s mʊ s cʊ bʊ t prʊt dbə k plɪ t

**Maximal and minimal syllable in ηono-ŋone dialect and the sum of syllable in one word unit**

(9) Table of Masbagik syllable use

<table>
<thead>
<tr>
<th>One syll</th>
<th>Two syll</th>
<th>Three syll</th>
<th>Fourt syll</th>
</tr>
</thead>
<tbody>
<tr>
<td>strʊ m</td>
<td>jʊ .rə n</td>
<td>Bʊ.lə .jə r</td>
<td>a .ni.yə .y lə ?</td>
</tr>
<tr>
<td>strʊ k</td>
<td>lə .ŋə gə r</td>
<td>Bʊ.tə ŋə ko n</td>
<td>-</td>
</tr>
<tr>
<td>wə h</td>
<td>jæ .gu r</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wæt</td>
<td>m.pə s</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

From the table above the researcher showed that ηono-ŋone dialect has four syllables in unit word.

**Consonant cluster in ηono-ŋone dialect**

- Consonant cluster in a syllable

The researcher found that consonant cluster in ηono-ŋone dialect had minimal CC and maximal consonant CCC in a word.

Data illustrating consonant cluster in ηono-ŋone dialect

<table>
<thead>
<tr>
<th>bro ?</th>
<th>prʊ t</th>
<th>mət ?</th>
</tr>
</thead>
<tbody>
<tr>
<td>mʊə t</td>
<td>cʊ .bʊ t</td>
<td></td>
</tr>
<tr>
<td>plə ŋ</td>
<td>bre .ŋu s</td>
<td></td>
</tr>
<tr>
<td>graəʊ s</td>
<td>bro ?</td>
<td>braə ?</td>
</tr>
<tr>
<td>crə :b k</td>
<td>cʊ .r t</td>
<td></td>
</tr>
<tr>
<td>sraə t</td>
<td>græ s</td>
<td>grʊ p</td>
</tr>
<tr>
<td>grʊ s</td>
<td>glt s</td>
<td>grə k</td>
</tr>
<tr>
<td>jra t</td>
<td>jre h</td>
<td>kɾ t s</td>
</tr>
<tr>
<td>kə m</td>
<td>klu s</td>
<td>plʊ t</td>
</tr>
<tr>
<td>plɪ t</td>
<td>skʊ r</td>
<td>sɾ t</td>
</tr>
<tr>
<td>sə m.pəŋ</td>
<td>stə r</td>
<td>stə n</td>
</tr>
<tr>
<td>tə p</td>
<td>tra .wəh</td>
<td>kə lə ?</td>
</tr>
<tr>
<td>jra t</td>
<td>kɾə ŋ</td>
<td>kɾ t</td>
</tr>
<tr>
<td>ple h</td>
<td>træ k</td>
<td>cə l ᝡ</td>
</tr>
<tr>
<td>kɾ ŋ.ki t</td>
<td>spa t</td>
<td>strʊ m</td>
</tr>
<tr>
<td>prʊ s</td>
<td>prʊ :</td>
<td>trəŋ</td>
</tr>
<tr>
<td>trɪ s</td>
<td>prə s</td>
<td>klæk</td>
</tr>
<tr>
<td>prə .kəs</td>
<td>jə ŋ.kɾe k</td>
<td></td>
</tr>
<tr>
<td>kə bə s</td>
<td>kʊ bʊ s</td>
<td>kə bə s</td>
</tr>
<tr>
<td>kə bə h</td>
<td>bə tə ?</td>
<td>bə tə k</td>
</tr>
<tr>
<td>sə mpru:</td>
<td>kɾ t s</td>
<td>gbok</td>
</tr>
<tr>
<td>jə r</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Identifications of consonant cluster in ηono-ŋone dialect**

Pr : prʊ t, sə mpru, pru, prʊ s, prə s, prə kəs

Cr : cʊ bʊ t, cʊ rə t, crubə k

Kr : jə ŋkɾe k, kɾə t, kɾə ŋ, kə ŋkï t | , kɾ t s

St : stə r, stə n

Str : strʊ m

Sr : sə m.pə ŋ, sɾ t

Tr : træ wə h, træ k, træŋ, trɪ s
1. Diagram of high and low sonorant levels in ηανο–ηωνε dialect

<table>
<thead>
<tr>
<th>- sonorant</th>
<th>+sonorant</th>
</tr>
</thead>
<tbody>
<tr>
<td>S C P B J G K T</td>
<td>M&lt;L=R</td>
</tr>
</tbody>
</table>

The assumption on diagram above showed that consonant S has low level than P. Consonant P was same level with consonants C, K, G and J. But consonant D had high level than J and consonant D had low level than B. It had low level than M, consonant M had low level than consonant L but same level with consonant R. The researcher showed right on second diagram sonorant sequences that had low and high level with systematic on it after showing appear vowel ‘ə’ when fast speech.

Sonorant sounds produced with a vowel tract cavity in which spontaneous voicing is possible. Vowels, glides, liquids and nasals are all sonorants. (Akmajian:1983.p.146)

To know how to read high and low sonorant, the researcher started from right (+) which it had high level while lift (-) had low level. Right nucleus near sonorant level became high. For consonants M, L and R attested had high levels sonorants because it always appeared to adjoin with vowel or nucleus to answer another consonant. The researcher showed the data that was not consonant cluster but when speech listen such consonant cluster.

Such instruction above the researcher used example ‘gbok’ word which this word if it was used fast speech speaker would listen like there was vowel ‘ə’ after consonant ‘g’ to be ‘gə bok’.

Data illustrating appear vowel ‘ə’ in ηανο–ηωνε dialect

| b, r, n, d, ɹ, k, t, p, t, s, k, g, ɹ, k |
| j, l, p, j, b, k, j, b, l, p, t, k, b, o, s, k, d, o, l |
| b, t, k, b, t, p, t, d, b, k, r, b, k, r, b, o, p, c, o, t |
| p, b, ɹ, p, t, p, b, ɹ, j, ɹ, y, l, t, c, l, t, g, t, k |
| g, k, b, h, s, gæn.tu, s, k, ɹ, d, o, k |

(10) The table of sonorant sequences

<table>
<thead>
<tr>
<th>- sonorant</th>
<th>+sonorant</th>
</tr>
</thead>
<tbody>
<tr>
<td>S &lt; P = C = K = G = J &lt; D &lt; B &lt; M &lt; L = R</td>
<td></td>
</tr>
</tbody>
</table>

From the data above we could see that those consonants are left to the right or consonant far to consonant near vowel that is consonant cluster that had systematic sequence. It means that they could not change to place. For example, ‘strə m’ consonant cluster sequence was s-t-r and did not changed to be s-r-t or t-s-r and so on. These showed that it influenced these case. For this case the researcher saw throught a feature sonorant from each consonants.

5.2.1.4.6 Nasal homorganic

ηανο–ηωνε dialect allowed nasal homorganic used on some words. For some words in ηανο–ηωνε dialect had nasal which
was not mentioned with nasal consonant cluster although nasal appeared adjacent with a consonant because on this case Sasak Masbagik did not allow nasal to adjoin with consonant until common nasal was separated by syllable and called by nasal homorganic. Nasal homorganic is nasal adjoined with another consonant that had place of same articulation.

The illustrates data of nasal homorganic in η:ono-η:one dialect

| n.t loosen | m.pə s | η,ko s |
| n.dot | m.əo t | η,kə s |
| m.pə s | n.də t | n.do t |
| n.tə h | n.tən | n.tə n |
| n.tə t | n.təʔ | n.də m |

There were some nasal homorganic that could be seen such as CC but separated in syllable. The researcher prepared explanation about this on next section on syllable process.

The sounds of classification distribution

5.2.2.1 Vowel sequence Distribution

The researcher introduced the vowels of Sasak Masbagik that could be transcribed in many differences way because accents of Sasak Masbagik differ greatly in the vowels they used because there was no one right way of transcribing even a single accent of η:ono-η:one dialect.

The generalization of η:ono-η:one dialect had different a vowel and a consonant various shape when utterances also. The data explained how sounds had restriction on the occurrence of vowel sequences on the co-occurrence of stress and tone or on placement of it and to be in certain positions in a syllable or word. It was found distributional problems concerning supra segmental such as syllable.

Vowels are sonorous syllabic sounds made with the vocal tract more open than it is for consonant and glide articulations. Different vowels are produced by varying the placement of the body of the tongue and shaping the lips. The shape of the cavity can be further alternated by protruding the lips to produce rounded vowels or by lowering the velum to produce a nasals vowels, vowels may be tense or lax depending on the degree of vocal tract constriction during their articulation. O’grady Dobrovolsky and Aronoff.

5.2.2.1.1 The puzzle

The data come from Sasak language especially η:ono-η:one dialect bi-syllabic root in this section. The research found that a vowel could not together appear with some vowels and found phoneme and allophone in the data.

5.2.2.1.1 Masbagik bi-syllabic roots
The data of vowels ŋəno-ŋənə dialect

Sasak language had some vowels in common use between a, A, i, ɪ, u, ʊ, e, æ, ə, o, ɔ. Each vowel had some variants until the researcher classified these vowel appropriate utterances.

5.2.2.1.2 Logical possibility

The researcher had expected eleven logically possible vowels sequences in bi-syllabic roots and if number results from random pairing get 121 vowels sequences, eleven vowels from in V₁ and eleven vowels from V₂ if the calculations get number resulting (11x11=121) vowels logical possible vowels sequences.

 ✓ Logically possible vocalic patterns of bi-syllabic roots

\[
\begin{align*}
\text{a} & \quad \text{æ} & \quad \text{u} & \quad \text{ɪ} & \quad \text{e} & \quad \text{ə} \\
\text{ʊ} & \quad \text{o} & \quad \text{ɛ} & \quad \text{æ} & \quad \text{u} & \quad \text{i} \\
\text{ɪ} & \quad \text{e} & \quad \text{ə} & \quad \text{ʊ} \quad \text{o} & \quad \text{ɛ} & \quad \text{æ} \\
\text{u} & \quad \text{i} & \quad \text{ɪ} & \quad \text{e} & \quad \text{ə} & \quad \text{ʊ} \\
\text{ʊ} & \quad \text{o} & \quad \text{e} & \quad \text{æ} & \quad \text{u} & \quad \text{i} \\
\text{ɪ} & \quad \text{ə} & \quad \text{ʊ} & \quad \text{o} & \quad \text{ɛ} & \quad \text{æ} \\
\text{u} & \quad \text{i} & \quad \text{ɪ} & \quad \text{e} & \quad \text{ə} & \quad \text{ʊ} \\
\text{ʊ} & \quad \text{o} & \quad \text{e} & \quad \text{æ} & \quad \text{u} & \quad \text{i} \\
\text{ɪ} & \quad \text{ə} & \quad \text{ʊ} & \quad \text{o} & \quad \text{ɛ} & \quad \text{æ} \\
\text{u} & \quad \text{i} & \quad \text{ɪ} & \quad \text{e} & \quad \text{ə} & \quad \text{ʊ} \\
\text{ʊ} & \quad \text{o} & \quad \text{e} & \quad \text{æ} & \quad \text{u} & \quad \text{i} \\
\text{ɪ} & \quad \text{ə} & \quad \text{ʊ} & \quad \text{o} & \quad \text{ɛ} & \quad \text{æ} \\
\end{align*}
\]

The researcher used V₁ and V₂ that mean that the first vowels is the vowel appearing in V₁ in vertical and V₂ mean second vowel in horizontal. For example in first column include the vocalic sequences beginning with a in V₁ and next row the vowel appearing in V₂.

5.2.2.1.3 Determining the vocalic patterns in Masbagik bi-syllabic verb roots

The researcher found how many vowels sequences in Masbagik bi-syllabic verb roots and how many were not. The researcher presented one hundred twenty one types of vowels sequences those are possible give the eleven vowels in (5.2.2.1.1.2).

The next step of the analysis was to determine which vocalic sequences ŋəno-ŋənə dialect actually. To determine whether Masbagik had a particular vocalic sequence, the researcher saw at the data (5.2.2.1.1.1) and the researcher explained them. The researcher took an example kuræ? and lato? in (5.2.2.1.1.1). The word kuræ? “scabies” showed the vocalic sequence [u...æ] while lato?
“blister” showed the vocalic sequence [ə…ʊ]. Two examples showed that [u…æ] and [ə…ʊ] were attested as Masbagik that had bi-syllabic verb roots and this vocalic sequences.

To know the result from this data, the researcher decided which vocalic sequences and to deduce from this data of example which ones were not attested.

The researcher showed at the 121 logically possible types of vowels sequences in (5.2.2.1.2) and look which could be example and could not. The researcher had started from the logical possible vocalic sequences with listen and used both examining the data in (5.2.2.1.1) and doing record the result.

The researcher listed the eleven vocalic sequences beginning with ‘‘a’’ in V₁ showing in logically possible. This means that the researcher started with vowel sequence [a …a] and examine all of the data logically possible and next some vocalic sequences.

5.2.2.1.4 Attested and unattested bi-syllabic verbal roots in Masbagik

| a ...a | *** |
| a ...Λ | *** |
| a ...i | *** |
| a ...u | *** |
| a ...o | ma no k |
| a ...ε | ba ge ? |
| a ...æ | ta æk |
| a ...ε | ta ηgæl |
| a ...o | la lo |
| a ...o | Λ mpo? |
| a ...c | ka c s |
| a ...æ | ta ηkæ η |
| i...a | *** |
| i...Λ | iα ? |
| i...i | iti |
| i...i | η i mpi |
| i...i | ist ? |
| i...i | *** |
| i...u | milu |
| i...u | *** |
| Λ ...a | *** |
| Λ ...æ | ta ηgæl |
| Λ ...i | *** |
| Λ ...ε | ι nte |
| Λ ...ø | *** |
| Λ ...o | ι ndo? |
| Λ ...o | cipæ k |
| Λ ...o | *** |
u...a ***
ø...a ***
æ...u æpu?

u...ʌ uʌ? ε...e ε pe
ø...ʌ to mpʌ h æ...e ***

u...i kupi ε...æ ε læs
ø...i *** æ...æ kæyæ

u...i kuli? ε...e ke ræ
ø...i ***

u...u uru ε...o bæ lo
ø...u *** æ...o

u...o jjuo? ε...c pe lɔ k
ø...o jo ksu r *** æ...c

u...ɛ ule? ε...a pe ræсла?
ø...ɛ ***

u...æ ulæk ε...ʌ keʌ?
ø...æ *** ε...i sædi

u...ɔ bulɔt ε...i sædɪ?
ø...ɔ ***

u...o uloh ε...u tətu
ø...o po ndokʌ n ε...o læto?

u...œ ** po ndokʌ n ε...œ lææ
ø...œ ***

æ...u æ...ø sədjæ

æ...œ ***

æ...ʌ ε lʌ? ε...c get k
æ...ʌ ***

æ...i ***
æ...i dæki ε...c ***

æ...i le pr s ε...ʌ oðæ k-oðæ k
æ...i æɪ? ε...ʌ nə lʌ?
æ...i ***

æ...u ***
æ...u æwu-æwu
The researcher found that there were many vowels sequences unattested when they were combined with other vowels. For more clearly in (5.2.2.1.1.4) this data the researcher did bold and crossed out the unattested ones on vocalic sequence and all other vocalic sequences are attested.

5.2.2.1.5 Attested and unattested bi-syllabic verbal roots in Masbagik language

\[*a ...a *Λ ...a *i ...a *I ...a \\
*u ...a *u ...a *ε ...a *æ ...a \\
ε ...a *o ...a *c ...a \]

The eleven vowels occured in the first sequence at first vowel \(V_1\) and second vowel \(V_2\) had some unattested form when they were combined with other vowels such as vowel  \(a\)  
\((a ...a , a ...i , a ...1 , a ...u), Λ (Λ ...a , Λ ...i , Λ ...u , Λ ...o , Λ ...ε ), i (i ...a , i ...1 , i ...u , i ...ε , u ...a , u ...o , u ...ε ), ι (ι ...a , ι ...1 , ι ...ε , u ...a , u ...ο , u ...ε ), ο (ο ...a , ο ...i , ο ...1 , ο ...ε , u ...a , u ...ο , u ...ε ), ρ (ρ ...a , ρ ...i , ρ ...1 , ρ ...ε , u ...a , u ...ο , u ...ε ), σ (σ ...a , σ ...i , σ ...1 , σ ...ε , u ...a , u ...ο , u ...ε , θ ...o ).\)
The unattested vowel sequences in ηανο-ηανε dialect that the researcher used the data (5.2.1.1.5) were marked by asterisk symbol. From these data the researcher found that there was vowel Α…E short mid central vowel which did not appear together by mid front vowel Α in V₁ but these data also demonstrated that vowel E co-occur with vowel Α in V₁.

According to Peng. 2013 Linguists analyzed speech sound by looking at their articulatory, acoustic, and perceptual properties in a branch of linguistics known as phonetics. One branch of phonetics was concerned with the production or articulation of sounds, that is, their articulatory characteristic. This branch of linguistic was concerned with such questions as how sounds were produced, what parts of human speech organs were involved in the production of speech sounds, where the articulators were in the production of different speech sounds, etc. with respect to vowels, there was a general agreement among linguists that the relative position of the tongue and the rounding of the lips determined the quality of vowels we perceived.

The researcher put tongue position shape on the next page on analysis took from O’grady & Dobrovolsky book.

5.2.2.1.1 Analyze


(11) This table illustrates the vowel present (UR=unrounded) and (R= rounded) on appropriate ηανο-ηανε dialect tongue positions.

<table>
<thead>
<tr>
<th>Front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>u tense</td>
</tr>
<tr>
<td>ί</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>lax</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td>Α</td>
<td>o tense</td>
</tr>
<tr>
<td>Α</td>
<td>Α</td>
<td></td>
</tr>
<tr>
<td>Α</td>
<td>lax</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>æ</td>
<td>α tense</td>
</tr>
</tbody>
</table>


Long vowels: ι:, ι:, ι:, α:, and æ:

Short vowels : ί , ο , α, Α, and æ

5.2.2.1.2.2 The descriptions of articulatory grid vowels by use Masbagik people

a. Vowel /α/ : the features are [long back low unrounded].
b. Vowel/Α / : the features are [short central mid unrounded].
c. Vowel /i/ : the features are [long front high unrounded].
d. Vowel /ί / : the features are [short front high unrounded].
e. Vowel /u/ : the features are [long back high rounded].
f. Vowel /u/ : the features are [short back high rounded].
g. Vowel /ε / : the features are [short front mid unrounded].
h. Vowel /æ/ : the features are [long front low unrounded].
i. Vowel /ə/: the features are [long central mid unrounded].

j. Vowel /o/: the features are [short back mid rounded].

k. Vowel /ɔ/: the features are [long back mid rounded].

### 5.2.2.1.3 Conclusion

This chapter introduces the phonological distribution on Sasak language exactly ṭono-ṭane dialect that every vowel was used by Masbagik people that had restriction when they were combined with other vowels.

The purpose of use logical possibility is that this refer to the concepts the free following certain condition (Peng: 2013).

The researcher found that there were some vowels having same features that can not co-occur in one word such as vowels (a …a) central low, (ʌ …ʌ) (i …i) front high, (o …u) back high, (o …ɔ) back mid. Vowel a did not appear in second vowel (V₂) on all positions followed by vowels although same feature can be seen on vowels sequence a …a, a …i, a …i and a …u low back vowel that did not appear together by long high front and high back vowel.

In ṭono-ṭane dialect, variant short vowel ʌ did not appear when it was combined with mid central-low back(ʌ … ʌ), mid central-high front(ʌ … i), mid central-high back(ʌ … u) and (ʌ … u), mid central-mid front(ʌ … ʌ) articulatory.

Vowel ʌ …ɛ short mid central vowels did not appear together by mid front vowel ʌ in V₁ but these data also demonstrate those vowels ɛ ,ə and æ distributions co-occurrence with vowel ʌ when they in V₁ positions.

Vowel u (high back vowel) cannot co-occur with vowel a (low back vowel) and vowel o (mid back vowel). Vowel u and o which has the same features—high back cannot appear with vowel o (mid back), as well as vowel o cannot appear with vowel u.

Vowel ɛ cannot be followed by some vowels that are ɛ …a (mid front -back low), ɛ …i(front mid-front high), ɛ …u and ɛ …u (front high-back high). Vowels ɛ …i, ɛ …u, long mid front vowel cannot appear together by high vowel.

Vowel æ does not appear by vowels æ…a front low-back low, æ…ʌ front low-back low, æ…ɛ front low-front mid, æ…ɔ front low-central mid, æ…ofront low-back mid, æ…ɔ front low-back mid. Long front low vowel (æ) did not meet with long back low (a ) and short mid central (ʌ ), short mid front (ɛ ), long mid central (ɔ), long mid back vowel (o) and short mid back vowel (ɔ ).

Vowel ɔ…ə long mid central first vowel (V₁) can appear with all vowels.

Vowel o does not appear by vowels o…a back mid-back low, o…i back mid-front high, o…i back mid-front high, o…u back mid-back high, o…u back mid-back high and (o…ɔ) back mid-back mid. Vowel o and ɔ (mid back vowel) cannot appear with vowel i and i (high front vowel) and vowel u and ɔ (mid back vowel).

The last vowel ɔ does not appear by vowels ɔ …a back mid-back low, ɔ …i mid back-front high, ɔ …i mid back-front high, ɔ …u mid back-back high, ɔ …u mid back-back high, ɔ …ɛ mid back-mid front and ɔ …o mid back- mid back. The result of the conclusions is from 121 vowels sequences the
getting 48 unattested sequences although they have some same features on ṭəno-ṇəne dialect.

It is hard to have a specific conclusion because the data was not easy for specification and could not set vowel prediction in ṭəno-ṇəne dialect.

5.2.2.2 Co-occurring sounds

Introduction

In this session the researcher introduced vowel and syllable distribution Masbagik’s use. The researcher explained about vowel’s variants such as vowel’s ‘a’ variant is ‘ɐ’, ‘i’ has variant ‘ί’, ‘u’ has variant ‘ʊ’, and ‘ɛ’ vowel has two variants unlike other vowel which has one variant such as ‘æ and ο’ and the last is ‘i’ vowel which has variant ‘ί’.

In these session the researcher found that vowel variant had short utterance, the goals of this session was to show those vowel distribution that could be a phoneme and allophone. For getting identification of the result, the researcher used word and syllable distribution.

First, the researcher used word distribution for getting a phoneme and an allophone, it was used for vowel identification in a word what they could stand alone or follow by a consonant.

Second, the researcher used syllable distribution for getting a evidence from word’s distribution result.

1. The puzzle

Data illustrating the distributions of vowels a and Λ

<table>
<thead>
<tr>
<th>Phonemes</th>
<th>Allophones</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) /a/</td>
<td>[a ]</td>
</tr>
<tr>
<td>(b) /Λ/</td>
<td>[Λ ]</td>
</tr>
<tr>
<td>(c) /?/</td>
<td>[a ] [Λ ]</td>
</tr>
</tbody>
</table>

The meaning of question symbol (?) is to know what this vowel come from different phoneme or not, or maybe there is no phoneme until it is giving exception so that it can be attested data. And now the researcher went to step and started analyzing the pattern.
5.2.2.1 Vowel ɑ and Λ distribution

2. Analyze

Determining the distribution of vowel

According to Peng (2013), there are five steps in determining sounds distribution that are (a) sorting data according to the sound or sounds whose distributions are being investigated; (b) listing the environments which these sounds are found; (c) eliminating the redundant environments; (d) comparing the environments to determine whether they are unique to particular sounds; and (e) inferring the unattested patterns that the researcher did not use because it determined different environment from a vowel.

The researcher presented a puzzle involving the sasak masbagik vowel in these session. The first, the researcher involved the distribution of vowel in word initial, medial and midal position and the second, it concerned the distribution of Sasak Masbagik’s vowel with immediately following consonant.

The researcher showed this puzzle highlight the fact that vowel distribution has restriction in their distribution. This data reveal where that vowel distribution can or cannot appear in a word.

Listing the environments

<table>
<thead>
<tr>
<th>ɑ</th>
<th>Λ</th>
</tr>
</thead>
<tbody>
<tr>
<td>r..._svc</td>
<td>#...η</td>
</tr>
<tr>
<td>#...o</td>
<td>b...η</td>
</tr>
<tr>
<td>l...ε</td>
<td>s...k</td>
</tr>
<tr>
<td>l...w</td>
<td>η...n</td>
</tr>
<tr>
<td>p...l</td>
<td>m...?</td>
</tr>
</tbody>
</table>

After steps above the researcher found the fact that vowel’s restriction on their distribution but in these case they overlap on their distributions. It means that their distribution appear position similarity.

Eliminating the redundant environments

<table>
<thead>
<tr>
<th>ɑ</th>
<th>Λ</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>post</td>
</tr>
<tr>
<td>r</td>
<td>_svc</td>
</tr>
<tr>
<td>#</td>
<td>o</td>
</tr>
<tr>
<td>l</td>
<td>ε</td>
</tr>
<tr>
<td>p</td>
<td>w</td>
</tr>
<tr>
<td>s</td>
<td>l</td>
</tr>
</tbody>
</table>

The purpose of these steps was to show significant environment from listing the environment describes. The researcher found those distribution vowel ɑ and it’s variant same distribution because they appear on word initial and medial positions.
Comparing the environments

The researcher compared the environment with following the fact that was not all logically possibility attested because one sequence on these vowel has restriction on their distribution. Both vowels found that they overlap on their distribution. It means that it is distribution similarity. And from data above the researcher found also vowel ‘α’ follow (r, l, p, s, ɔ , o, ɛ , w) and vowel Λ follow (b, s, η, m, k, n, ? ).

The researcher made a result with change diagram before with diagram result appropriate.

\[
\begin{array}{c|c}
\text{α} & \Lambda \\
\hline
\text{α} & \Lambda \\
\end{array}
\]

The contrastive environment becomes result in this session because have same environment that can appear in initial and medial and than they call a phonemes.

3. Conclusion

The contrastive environment became result in these session because it had same environment.

Next, the researcher introduced syllable distribution on vowel ‘α’, the purpose of distribution was to know whether or not their distribution changed when it appeared on a syllable.

5.2.2.2 Syllable distribution

In this session the researcher used syllable distribution as a comparison for getting differences result. Syllable is a unit of linguistic structure that consists of a vowel and any consonants that are associated with it.(O’grady, Dobrovolsky, and Aronoff)

Before, the researcher used vowel distribution for knowing what each vowel to be a phoneme or an allophone. The vowel distribution was not an evidence yet because it was not explained specifically until the next distribution used syllable distribution.

The purpose of next distribution was that the researcher wanted to get real evidence on these vowel. The researcher used same the data so that it was easy to know the difference.

2. Analyze

Determining the distribution of vowel

The researcher was to analyze through sorting the data which the data separated point direct as a symbol from used syllable.

Sorting the data

\[
\begin{array}{c|c|c}
\text{α} & \text{gloss} & \Lambda & \text{gloss} \\
\text{a} & \text{o?} & \text{yes} & \text{bΛ η.kat} \\
\text{rice field} & \text{ıa ɛ ?} & \text{previously} & \text{sa .sΛ k} \\
\text{island name} & \text{rα .ɔ s speak} & \text{ma .ηΛ n} & \text{eating} \\
\text{areca nut eat} & \text{la .wΛ η} & \text{door} & \text{ma .mΛ ?} \\
\text{then} & \text{pa .ləη conscious} & \Lambda & \eta.kΛ ?
\end{array}
\]

Comparing the environments

The comparison of the environment of vowel ‘α’ and ‘Λ’ appearing, the researcher looked at the sorting data and the researcher found that syllable distribution show different
result with vowel distribution which it got both vowels that had differences. Vowel ‘α’ appear on first syllable and its variant appear on two syllables position: first syllable and second syllable.

There are two examples of the researcher such as ‘αˌɔʔ’ word which can be seen from vowel ι appearing as first syllable on a word, syllables symbol sign by pointed as separation between syllable with other syllble and second example is ‘ιŋ.kaʔ’ word which has two syllables such as ιŋ and kaʔ. In one word, the researcher gave an evidence that variant vowel ‘Λ’ appear on first and second syllable. Other evidence those variant vowel (Λ) can appear on first and second syllable is always followed by consonant while vowel ‘α’ can not be followed by consonant from a word despite a syllable.

5.2.2.2.3 Vowel i and ɪ distribution

The researcher presented the data of vowel ‘i’ and ‘ɪ’ which it used two distribution that are vowel and syllable distribution. Next, the researcher prepared one puzzle for vowel and syllable diatribution.

1. The puzzle

Data illustrating the distributions of vowels i and ɪ

\[
\begin{array}{c}
\text{id} \quad \text{bisoʔ} \quad \text{læŋt} \\
\text{sidoʔ} \quad \text{sidøt} \\
\text{sisoʔ} \quad \text{iniz} \quad \text{isiʔ} \\
\text{æwiz} \quad \text{tækz} \\
\end{array}
\]

The researcher analyzed by sorting the data and listing the environment of the two vowels. Before analyzing the data above, the researcher found there were three possibilities about the relationship between the two vowels:

a. They come from the same of vowel i
b. They come from phoneme ɪ
c. They come from different phoneme

The researcher defined allophones as the variant of the same phoneme. The researcher’s assumption is that vowel ‘i’ is phoneme because it’s wider distribution than ‘ɪ’ is allophone.

Next, the purpose of this diagram is an evidence what both vowels come from same phoneme or another phoneme until the researcher use question symbol ‘?’ as an evidence that phoneme that phoneme come from outside.

Relationship of a phoneme to its allophones

<table>
<thead>
<tr>
<th>Phonemes</th>
<th>(a) /i/</th>
<th>(b) /ɪ/</th>
<th>(c) /?/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allophones</td>
<td>[i]</td>
<td>[ɪ]</td>
<td>[i]</td>
</tr>
</tbody>
</table>

If such sound are not contrastive that means that they cannot be a phonemes. Common allophones as the variants of the same phoneme means that it is different pronunciation of the same underlying. In order to two or more sounds to be classified as allophone, first it must be complementary distribution and second it must be same phonetic.

2. Analyze

The researcher used sorting the data as first step on analyzing the data. Sorting the data is very important because to know vowel distribution on vowel’s environment. The
researcher made two groups include vowel ‘i’ in one column and vowel ‘ɪ’ with different column.

Determining the distribution of vowel

Sorting the data

<table>
<thead>
<tr>
<th>i</th>
<th>gloss</th>
<th>ɪ</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>idʌ p</td>
<td>feeling</td>
<td>æwɪ s</td>
<td>cut grass</td>
</tr>
<tr>
<td>bisoʔ</td>
<td>wash</td>
<td>ʈəkɪʔ</td>
<td>pinch</td>
</tr>
<tr>
<td>sidoʔ</td>
<td>kiss</td>
<td>ɭæŋɪ t</td>
<td>sky</td>
</tr>
<tr>
<td>sidʊ t</td>
<td>spoon</td>
<td>isiʔ</td>
<td>use</td>
</tr>
<tr>
<td>sisoʔ</td>
<td>snail</td>
<td>iniʔ</td>
<td>can</td>
</tr>
</tbody>
</table>

Listing the environments

Listing environment refers to immediately preceding, the researcher started by the immediately adjacent environment. The researcher started from ‘idʌ p’ word which vowel ‘i’ appearing in word initial position. Mark with sign (#) indicated with the word boundary while ‘...’ describe from location. For existance above, it is (#) indicating vowel appearing in word initial position.

<table>
<thead>
<tr>
<th>i</th>
<th>ɪ</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>w…s</td>
</tr>
<tr>
<td>b…#</td>
<td>k…?</td>
</tr>
<tr>
<td>s…#</td>
<td>ƞ…t</td>
</tr>
<tr>
<td>s…#</td>
<td>s…?</td>
</tr>
<tr>
<td>s …#</td>
<td>n…?</td>
</tr>
</tbody>
</table>

The researcher did not put same environments because this session eliminated same environments.

Eliminating the redundant environments

The purpose of this section is for easy identification of vowel distribution with eliminating some of follower similarity.

<table>
<thead>
<tr>
<th>i</th>
<th>ɪ</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>post</td>
</tr>
<tr>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>b</td>
<td>k</td>
</tr>
<tr>
<td>s</td>
<td>ƞ</td>
</tr>
<tr>
<td>s</td>
<td>n</td>
</tr>
</tbody>
</table>

From the result of the data the researcher found that distribution vowel ‘i’ was large and could appear on all positions such as word initial, medial and final position than vowel ‘ɪ’ had limited distribution that are only initial and medial positions and did not appear in word final position.

The researcher did not show same environment but it selected through a representative from some data until it could be specific data. And the researcher entering the data in next session was comparing the environment.

Comparing the environments

Next step is vowel comparing the environment, the researcher found that vowel ‘i’ was phoneme because wider distribution appear on all positions while it’s variant was an allophone because limited distribution and could appear only on initial and medial positions. Next, the researcher showed different diagram before showing that vowel ‘i’ was a
phoneme from its variant and vowel ‘ɪ’ as an allophoneme.

2. Diagram result showing phoneme

```
   i
  |
  i
```

The fact with diagram showing vertical line means that first vowel as a phoneme and second vowel as an allophone.

3. Conclusion

Distribution of vowel ‘‘i’’ can appear on all positions until it can be a phoneme also and vowel ‘‘ɪ’’ having limited distribution which appear on medial position until this vowel as allophone from vowel ‘i’.

5.2.2.2.4 Syllable distribution

Usually, all syllables containing a long vowel and ending in a vowel-consonant sequence must be stressed.

2. Analyze

Determining the distribution of vowel

The researcher presenting the data with syllable form which it uses point as a separate between first and second syllable.

Sorting the data

<table>
<thead>
<tr>
<th>i</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.dɪ.p</td>
<td>feeling</td>
</tr>
<tr>
<td>æ.wɪ.s</td>
<td>cut grass</td>
</tr>
<tr>
<td>bi.soʔ</td>
<td>wash</td>
</tr>
<tr>
<td>tə.kɪʔ</td>
<td>pinch</td>
</tr>
</tbody>
</table>

si.doʔ    kiss
læ.ni t   sky
si.do t   spoon
i.st ʔ   use
si.soʔ   snail
i.ni ʔ   can

From the sorting data above the researcher found the fact that vowel ‘i’ always followed by open syllable and can be mono syllable or second syllable. While vowel ‘ɪ’ followed by close syllable and consonant than it does not appear as mono syllable.

The finding was that vowel ‘i’ could appear on first and second syllable while it’s variant appearing on second syllable only and follow by a consonant.

Comparing the environments

The data above vowel ‘‘i’’ is wide distribution than vowel ɪ. Vowel ‘‘i’’ can appear on all positions influenced by open syllable while vowel ‘‘ɪ’’ and dont have character to be a phoneme because it has limited distribution. The influence is close syllable and cannot be monosyllable such as vowel ‘i’ because it is always followed by consonant.

The researcher has some assumptions about both vowels by using rule for getting an answer.

Assumption I : ‘‘i’’ is a phoneme

```
\[
\text{Assumption I : } \text{‘‘i’’ is a phoneme} \\
\text{\begin{align*}
\text{i} & \rightarrow \text{ɪ} \\
\text{[i]} & \rightarrow [ɪ] \\
\text{+ syll} & \rightarrow \{ + \text{long} \} / \{ + \text{cons} \} / \{ + \text{cons} \}
\end{align*}}
\]
```
This assumption showed that vowel ‘i’ as a phoneme. Vowel ‘i’ would change to be vowel ‘ɪ’ when followed by a consonant.

Assumption II: ‘ɪ’ is a phoneme

\[
\begin{align*}
\text{ɪ} &\quad \xrightarrow{\text{C}} \text{i} \\
\text{ɪ} &\quad \xrightarrow{\#} \text{i}
\end{align*}
\]

Second, this assumption showed that vowel ‘ɪ’ is a phoneme which this vowel changes to be vowel ‘i’ when it is not followed by consonant. Hastag (#) symbol means that a consonant appear before vowel ‘i’ and does not follow by a consonant in behind.

From both assumptions the researcher took a conclusion that vowels become complementary distribution which they depend on each distribution.

3. Conclusion

After we saw the result above, the fact showed that syllable distribution occur a different result which on vowel ‘i’ the researcher found this vowel appearing on initial and final positions, while vowel ‘ɪ’ appear on word initial and medial position which this vowel is always followed by a consonant.

5.2.2.5 Vowel u and ʊ distribution

The researcher presented a data that is vowel ‘u’ and its variant on third sequence.

1. The puzzle

*Data illustrating the distributions of vowels u and ʊ in a word*

\[
\text{nu ndok jure pʊ ndokə n gulu suru t pusu t jægʊ r səro t jʊ kʊr r ulo?}
\]

The researcher analyze by using sorting data, list of environment of the two vowels. Before analyzing the data above the researcher’s three possibilities about relationships between two vowels:

a. They come from phoneme u
b. They come from phoneme ʊ
c. They come from different phonemes

The researcher back to explain about third diagrams use. In this vowel the researcher found there are two vowel ‘u’ use which both in assumption as a phoneme and an allophone.

*Relationship of a phoneme to its allophones*

\[
\begin{array}{c}
\text{Phonemes} \quad (a) \quad (b) \quad (c) \quad ? \\
\text{Allophones} & \text{u} \quad \text{ʊ} \quad \text{u} \quad \text{ʊ} \quad \text{u} \quad \text{ʊ} \quad \text{u} \quad \text{ʊ}
\end{array}
\]

The researcher’s assumption that (a) vowel ‘u’ as a phoneme until the researcher make a diagram showing direction in each
vowel. And it’s variant (b) as an allophone. While for (c) use question symbol because the researcher’s assumption that phoneme come from outside.

2. Analyze

Determining the distribution of vowel

Sorting the data

<table>
<thead>
<tr>
<th>u</th>
<th>gloss</th>
<th>v</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>uəʔ</td>
<td>go home</td>
<td>ʊŋdok</td>
<td>bent down</td>
</tr>
<tr>
<td>suɾo t</td>
<td>decline</td>
<td>jʊksʊr</td>
<td>ramming</td>
</tr>
<tr>
<td>gutu</td>
<td>louse</td>
<td>jægər</td>
<td>fist</td>
</tr>
<tr>
<td>pusə t</td>
<td>twist</td>
<td>səɾʊt</td>
<td>carpentry</td>
</tr>
<tr>
<td>jurɛ</td>
<td>roof</td>
<td>pʊndokən</td>
<td>restriction</td>
</tr>
</tbody>
</table>

Listing the environments

<table>
<thead>
<tr>
<th>u</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>n…n</td>
</tr>
<tr>
<td>s…#</td>
<td>j…k</td>
</tr>
<tr>
<td>g…#</td>
<td>g…r</td>
</tr>
<tr>
<td>p…#</td>
<td>r…t</td>
</tr>
<tr>
<td>j…#</td>
<td>p…n</td>
</tr>
</tbody>
</table>

Eliminating the redundant environments

<table>
<thead>
<tr>
<th>u</th>
<th>u</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>post</td>
</tr>
<tr>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>s</td>
<td>j</td>
</tr>
</tbody>
</table>

From the resulted above researcher found that vowel ‘‘u’’ has wider distribution and can appear on all positions such as word initial, medial and final position while vowel ‘‘ʊ’’ limited distribution is medial position only and not appear in word initial and final positions.

Usually on eliminating the environment the researcher don’t put all vowel’s environments but the researcher selecting through a representative method from some data until can be specific data. For clear these explain the researcher entering the data in next session on part comparing the environment.

Comparing the environments

The researcher’s comparing the environment from both vowels and found a fact those vowel ‘u’ appear on all positions such word initial, medial and final positions. While it’s variant has limited distribution and appear on two positions are medial and final position.

Diagram of phoneme and allophone

<table>
<thead>
<tr>
<th>u</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>u</td>
<td>ʊ</td>
</tr>
</tbody>
</table>

3. Conclusion

The conclusion of the data is vowel ‘‘u’’ wider distribution than vowel ‘‘ʊ’’. It can appear on all positions and called a phoneme. While vowel ‘‘ʊ’’ is an allophone because having limited distribution and as complementary distribution such completing phoneme and haven’t minimal pairs in every
words because vowel ‘‘u’’ always followed with a consonant until the researcher classified to short vowel.

5.2.2.2.6 Syllable distribution

Next section the researcher introducing a distribution through a syllable distribution. Syllable distribution different with vowel distribution because this section the researcher analyzing the data with look syllable’s appear and syllable’s sum on a word.

Determining the distribution of vowel

Sorting the data

<table>
<thead>
<tr>
<th>u</th>
<th>gloss</th>
<th>u</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>u.lə ?</td>
<td>go home</td>
<td>su.ru ?</td>
<td>order</td>
</tr>
<tr>
<td>su.ru t</td>
<td>decline</td>
<td>jù k.sù r</td>
<td>ramming</td>
</tr>
<tr>
<td>gu.tu</td>
<td>louse</td>
<td>jæ.gu r</td>
<td>fist</td>
</tr>
<tr>
<td>pu.su t</td>
<td>twist</td>
<td>sə.ru t</td>
<td>carpentry</td>
</tr>
<tr>
<td>ju.re</td>
<td>roof</td>
<td>pù n.docə n</td>
<td>dike</td>
</tr>
</tbody>
</table>

For vowel ‘‘u’’ distribution the researcher found same result with vowel ‘‘i’’ those they can appear on first and second syllable while their variants can appear on second syllable only.

Comparing the environment

The researcher showing vowel’s distribution through two assumptions are first assumption saying that vowel ‘‘u’’ phoneme and second assumption vowel ‘‘ʊ’’ phoneme. As an evidence from both assumptions above the researcher provide it these under.

Assumptions I : u as a phoneme

\[
\begin{align*}
\text{u} & \quad \text{u} \rightarrow o / C \quad C \\
[u] & \quad [u]
\end{align*}
\]

Vowel ‘‘u’’ or long vowel would changes when it followed by consonant and be short vowel ‘‘ʊ’’.

Assumption II : ʊ is a phoneme

\[
\begin{align*}
/ʊ/ & \quad 1. \; ʊ \rightarrow u / C \quad # \\
[ʊ] & \quad [u] \quad 2. \; ʊ \rightarrow u / #
\end{align*}
\]

Second assumption, the assumption in (1) showing that short vowel (ʊ ) would change be long vowel (u) when consonant before. (2) showing that short vowel (ʊ ) would change be long vowel (u) when there is no follow consonant.

3. Conclusion
The conclusion of this session is vowel ‘u’ is a phoneme because has wide distributions it can appear on two positions such as first and second syllables. While, vowel ‘ʊ’ has limited distribution because it just appear on second syllable and always follow by consonant in last word until it is an allophone because can completing vowel’s ‘u’ environment.

In vowel distribution before the researcher found that vowel ‘u’ having wider distribution same like this resulted while vowel ‘ʊ’ the researcher found limited distribution.

Next, the researcher present a puzzle əŋə-ŋən dialect and some data illustrated of vowel ɛ distribution and it variant in əŋə-ŋən dialect. From Masbagik’s vowel use only this vowel has two variants are vowel ‘ɛ’ and ə’ variants.

5.2.2.7 Vowel ɛ, ə, and æ distribution

1. The puzzle

Data illustrating the distribution in a word

cəλə ɳ          kəλə ʔ       məλə k
lɛ pə ɳ             ə ɛ
ɡənti ʔ          ɛ lə ʔ
mə tə          ɫəɛ     æə ʔ?
ɾəɛ          æə ɲə ɲ         bə lɛ
æə nu ʔ          ɲəɭə ɳ

The researcher analyzing the data above by sorting the data, list of environments, eliminating the redundant environment, comparing the environment on the three vowels. Before analyzing the data above the researcher have four possibilities about relationships between three vowels:

a. They come from the same of vowel ɛ
b. They come from phoneme æ
c. They come from phoneme ə
d. They come from outside

Usually, the researcher presenting diagram relationship of a phoneme and allophone. Means that the researcher dont know which as a phoneme and an allophone.

Relationship of a phoneme to its allophones

Phonemes (a) ɛ (b) æ (c) ə (d) ?

Allophones ɛ æ ə ɛ æ æ ə æ ɛ æ ə ə

The researcher’s assumption for third vowels are: first, vowel ‘ɛ’ is a phoneme for vowel ‘æ’ and ə’. Second, vowel ‘æ’ is a phoneme for vowel ‘ɛ’ and ə. And the last vowel ‘ə’ is a phoneme from vowel ‘ɛ’ and æ’. Exception symbol is question symbol (?) means phoneme come from outside.

2. Analyze

Determining the distribution of vowel

Sorting the data

ɛ gloss æ æ gloss ə gloss

lɛ pə ɳ frog ɫəɛ naughty cəλə ɳ dishonest
a ɛ ɫə heart æə ʔ water kəλə ʔ cook
ɛ lə ʔ tongue rəɛ form məλə k greedy
mə tə dead æə nu ʔ belong ɡənti ʔ change
ba le house ændæŋ request dəŋ an people

Listing the environments

\[
\begin{array}{ccc}
\varepsilon & \text{æ} & \text{o} \\
1...p & 1...# & c...l \\
t...# & #...t & k...l \\
#...l & u...# & m...l \\
t...# & #...n & g...n \\
1...# & #...n & d...ŋ \\
\end{array}
\]

Eliminating the redundant environments

<table>
<thead>
<tr>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>l</td>
<td>p</td>
<td>l</td>
<td>#</td>
<td>c</td>
<td>l</td>
</tr>
<tr>
<td>t</td>
<td>#</td>
<td>#</td>
<td>i</td>
<td>k</td>
<td>n</td>
</tr>
<tr>
<td>#</td>
<td>l</td>
<td>u</td>
<td>n</td>
<td>m</td>
<td>ŋ</td>
</tr>
</tbody>
</table>

After the researcher include a lot of identical environment the researcher to see clearly where three vowels are allow and has remove the repeat environment. After the redundant environments are eliminate the redundant environment which this session has doing eliminate some vowel following Masbagik word for example when a vowel has appear on initial position and next position appear same vowel could back not wrote because has representative by before vowel.

Comparing the environment

The data above showing those vowels ‘\varepsilon’ and ‘æ’ appear on all positions are word initial, medial and final positions. They are phonemes on their distribution. Then, ‘\text{o}’ has limited distribution appear on word initial and medial positions although this vowel limited distribution but it called phoneme because it’s environment cannot complementary another vowels environment means this vowel can not be complementary on vowels distribution because their environment has completed distribution. Next, the researcher make three diagrams for these result.

3. The diagram result of phoneme

\[
\begin{array}{ccc}
\varepsilon & \text{æ} & \text{o} \\
\end{array}
\]

The third diagrams above showing those they are different phonemes. If we look from the environment each vowels appear from same environment.

3. Conclusion

From the result before the researcher always make vowel has wider distribution is phoneme while limited distribution is allophone. But in this case very different result because there is one vowel has limited distribution but they are phonemes on it’s distribution. This occur because another vowel has completed distribution until did not need vowel’s ‘\text{o}’ environment. And now, the fact from third vowels those they are phonemes on their each distribution. They come from different phoneme and having each positions.

\[
\begin{array}{ccc}
\text{3} & \text{æ} & \text{o} \\
\end{array}
\]

Diagram above be an evidence that third vowels are phonemes on their environment.
Next the researcher using syllable distribution for getting different from distribution before.

5.2.2.2.8 Syllable distribution

2. Analyze

Determining the distribution of vowel

Sorting the data

<table>
<thead>
<tr>
<th>ε</th>
<th>gloss</th>
<th>æ</th>
<th>gloss</th>
<th>ɔ</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>le</td>
<td>.ra</td>
<td>η</td>
<td>frog</td>
<td>to.læ</td>
<td>naughty</td>
</tr>
<tr>
<td>cə.lə</td>
<td>η</td>
<td>dishonest</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a .te</td>
<td>heart</td>
<td>æ.t</td>
<td>?</td>
<td>water</td>
<td>kə.lə</td>
</tr>
<tr>
<td>water</td>
<td>cook</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ε .lə</td>
<td>?</td>
<td>tongue</td>
<td>ru.æ</td>
<td>form</td>
<td>mə.lə</td>
</tr>
<tr>
<td>greedy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ma .te</td>
<td>dead</td>
<td>æ.nu</td>
<td>?</td>
<td>belong</td>
<td>gən.ti</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ba .le</td>
<td>house</td>
<td>æn.dæŋ</td>
<td>request</td>
<td>də.ŋə</td>
<td>n</td>
</tr>
<tr>
<td>people</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For distribution on third vowels found those they can appear on first or second syllable, the researcher found also this vowel is a phoneme on their environment.

Comparing the environment

The result of eliminating environment above vowels ‘ε’ ,‘æ’ and ‘ə’ can appear on all positions. Next the researcher comparing the environment on third vowels.

Without an assumption the researcher saying those vowels ‘ε’ , ‘æ’ and ‘ə’ are phonemes. Because has differences distribution and they complete environment.

3. Conclusion

Although without using rule in these section, the researcher’s found those three vowels are phonemes because they come from different phoneme and having wider distribution. They appear on all positions and they can predictability as a phoneme from their distribution.

Before, the researcher found on first distribution above they as phoneme with wider distributions on their environment.

5.2.2.2.9 Vowel o and ɔ distribution

1. The puzzle

Data illustrating the distribution vowels

o and ɔ a word

ga nтоŋ | pɔ lтоt | toloʔ | ɔɔ pɔ k
kənə | rə ŋ
ɔ mbæt | ɔ ŋ t ɲ ndoʔ
pɪ ncoʊk | sərbok

Before start analyzing data above the researcher have four possibilities about relationships between two vowels are:

a. They come from phoneme o
b. They come from phoneme ɔ
c. They come from other phoneme

Relationship of a phoneme to its allophones

Phonemes (a) /o/ (b) /ɔ/ (c) /ʔ/

Allophones[ə] [ɔ] [o] [ʊ] [ɔ] [o] [ɔ]
Sorting the data

<table>
<thead>
<tr>
<th>ðòt</th>
<th>pencil</th>
<th>tolo?</th>
<th>put</th>
</tr>
</thead>
<tbody>
<tr>
<td>kom</td>
<td>road</td>
<td>ꜱ success</td>
<td>hanger</td>
</tr>
<tr>
<td>cÇ</td>
<td>lantern</td>
<td>ꜱndo?</td>
<td>stay over night</td>
</tr>
<tr>
<td>cÇ</td>
<td>mbæt</td>
<td>take off</td>
<td>ncook</td>
</tr>
<tr>
<td>cÇ</td>
<td>trace</td>
<td>sœrbok</td>
<td>salad</td>
</tr>
</tbody>
</table>

Listing the environments

<table>
<thead>
<tr>
<th>o</th>
<th>o</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>post</td>
</tr>
<tr>
<td>ð</td>
<td>l</td>
</tr>
<tr>
<td>m</td>
<td>r</td>
</tr>
<tr>
<td>c</td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td>m</td>
</tr>
<tr>
<td>#</td>
<td>n</td>
</tr>
</tbody>
</table>

Comparing the environments

According to the result eliminating above that vowel ‘o’ and ‘ð’ are phonemes because has wider distributions appearing in all positions. In Phonology’s study this case mention with overlap because they appearing on same position and follower similarity.

4. The diagram of phoneme result

```
  o
/ \
  o
```

The changes of diagram the resulted those both vowels has each distribution without need complementary from other vowel.

3. Conclusion

The conclusion of both vowels the researcher found the fact they can be phonemes because their wider distribution appearing in word initial, medial, and final positions. They followed by open and close syllables on each distribution.

5.2.2.2.10 Syllable distribution

In next distribution the researcher using syllable as different distribution for verification the researcher focus on used and appear syllable in a word. Masbagik has two syllables distribution in one stem each separated by point symbol.

1. Analyze

The researcher start with sorting the data follow by comparing environment. This
method showing the data direct with point symbol as separated.

Sorting the data

<table>
<thead>
<tr>
<th>gloss</th>
<th>o</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>l.ot.pencil</td>
<td>to.loʔ</td>
<td>put</td>
</tr>
<tr>
<td>g.т.о.г.</td>
<td>g.н.т.о.г.</td>
<td>hanger</td>
</tr>
<tr>
<td>wall lamp</td>
<td>n.doʔ</td>
<td>stay overnight</td>
</tr>
<tr>
<td>c.m.б.ет</td>
<td>take off</td>
<td>p.т.н.к.ок</td>
</tr>
<tr>
<td>s.т.ф.о.м.ер</td>
<td>s.в.б.о.к</td>
<td>salad</td>
</tr>
</tbody>
</table>

Can saw those vowel ‘о’ and ‘ɔ’ can appear on first and second syllable until they call phonemes.

Comparing the environments

The comparing between vowel ‘о’ and ‘ɔ’ can be a phoneme because their wider distributions. Like vowel distribution both vowels are phonemes because they overlap when they do distribution. As a result the researcher showing diagram change as a symbol those they as phonemes on their distribution.

The conclusion of this section is both vowels has wider distribution because they can appear on all positions.

And the resulted from vowel distribution has similarity with syllable distribution are their distribution showing those both vowels appear on all positions.

5.2.2.3 Consonant distributions of ɥəңə-ŋəŋ dialect

5.2.2.3.1 Liquid distributions

After the researcher showing vowel distribution the researcher continue presented a phenomenon from consonant is liquid distribution.

The researcher presented four steps involved in the identification of distributional restriction are sorting the data, listing the environments, eliminating the redundant environments and comparing the environment.

1. The puzzle

✓ Data illustrating the distributions of liquids

The meaning of question symbol (?) is what phoneme come from another liquid.

2. Analyze

✓ Determining the distribution of vowels
Listing the environment

<table>
<thead>
<tr>
<th></th>
<th>pre</th>
<th>post</th>
</tr>
</thead>
<tbody>
<tr>
<td>l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>r</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>pre</th>
<th>post</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>i</td>
<td>o</td>
</tr>
<tr>
<td>#</td>
<td>ε</td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td>æ</td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td>a</td>
<td>#</td>
</tr>
<tr>
<td>#</td>
<td>u</td>
<td>#</td>
</tr>
<tr>
<td>c</td>
<td>#</td>
<td>#</td>
</tr>
</tbody>
</table>

Comparing the environment

The comparing between liquids ‘l’ appear on initial and final positions while ‘r’ appear on initial and final position until the researcher saying those they phonemes on their distribution.

3. Conclusion

This data focus on two data are designed to illustrate the distribution of the Sasak Masbagik liquids are consonant ‘l’ and ‘r’.

The researcher analyzed the data and the researcher found that in Sasak Masbagik language both liquids has restriction on their distribution. Specifically ‘l’ is restricted on medial position and appear on initial and final positions or the position following the all vowels. And the liquid ‘r’ has similarity found by liquid ‘l’ is has restriction on medial and appear on initial and final and then the position following the all vowels.

Before, the researcher has assumes that either liquids are a phonemes but after the researcher analysis position the fact they are two distinct sounds and the conclusion from this research is they are phoneme in their distributions.

5.2.2.3.2 Glottal stop and velar distribution

Glottal stop and velar are two consonants has mention familiar but the fact they are differ which glotal stop (ʔ) has limited distribution and only appear in final position while velar (k) has large distribution.

The researcher begin consonant distribution with analyzing glotal stop
distribution and velar distribution. The researcher’s assumption that velar is phoneme from glottal stop until the researcher establish with collect the data from ŋəno-ŋənə dialect as next puzzle.

1. The puzzle

| kədə l | kəŋ ti ? | kobokə n | kəŋ t | tə ki ? |
| ule ? | sə di ? | e ɬə ? | ose ? |

Sorting the data

| k | gloss | ? | gloss |
| kədə l | runny nosed | kəŋ ti ? | finger |
| kəŋ ti ? | finger | sə di ? | move kobokə n | bowel | e ɬə ? | tongue |
| kəŋ t | adopted | ose ? | delete |
| tə ki ? | pinch | ule ? | go home |

Listing the environments

The purpose of listing the environment is for to know glottal and velar distribution environment. After finishing with first step the researcher’s saw environment and follower from glottal and velar.

<table>
<thead>
<tr>
<th>k</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>post</td>
</tr>
<tr>
<td>#</td>
<td>ə</td>
</tr>
<tr>
<td>#</td>
<td>ə</td>
</tr>
<tr>
<td>#</td>
<td>o</td>
</tr>
<tr>
<td>#</td>
<td>o</td>
</tr>
</tbody>
</table>

The fact establish that velar has wider distribution because it can appear on free positions without restriction. Whereas glottal stop has limited distribution because appear on final position.

Eliminating the redundant environments

The purpose of this step is easier for to know environment and follower. It has purpose for eliminating same follower until the researcher showing as a representative from all followers.

<table>
<thead>
<tr>
<th>k</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre</td>
<td>post</td>
</tr>
<tr>
<td>#</td>
<td>ə</td>
</tr>
<tr>
<td>ɬ</td>
<td>o</td>
</tr>
<tr>
<td>i</td>
<td>e</td>
</tr>
</tbody>
</table>

Comparing the environment

Usually, the researcher comparing result which the researcher showing diagram change as an evidence. The velar can appear on all positions while glottal just can appear on final position and than they always intercalation by vowels. Next diagram result after analyzing data above.

The diagram of phoneme result

<table>
<thead>
<tr>
<th>k</th>
<th>?</th>
</tr>
</thead>
</table>
Diagram above showing that velar (k) and glottal (ʔ) are different phonemes although glottal constrain only appear in final position.

Not enough with explanation above the researcher seeking their relationship and cause why they like that, the researcher using place of articulation on identify relation and cause on them.

The researcher using Akmajian’s book (1944-1983.p.108) on his book describing the consonant with a table those velar and glottal has relationship on manner of articulation are stops and voiceless until they always can appear together.

3. Conclusion

The conclusion of this case they are differences phonemes because it has wider distribution. The another fact are Masbagik not allow glottal appear on word initial or medial positions.

5.2.2.3 Nasal distribution

In these section the researcher introduced nasal phenomenon through ɳəno-ɳəne dialect. Which the researcher showed nasal such as ‘’ɳ, ɲ, ȵ, and m’. The purpose in this research is found nasal position appear in ɳəno-ɳəne and found what they come from one same phoneme or it come from different phoneme.

These phenomenon have in common restriction on of two or more resulting in gaps in the distribution. Such as Phonology’s explain that gaps in distributions stem from the fact that not all logical possibilities are attested.

Linguistic refer to these sounds as a phoneme, other sounds through different acoustically and articulatorily not play a significant role in distinguishing means but linguistic treat these sounds as the variants of other phonemes and refer to them as allophones.(Peng.2013)

This section the researcher has two objectives are first, analysis problem and second found phoneme and allophone on ɳəno-ɳəne dialect.

1. The puzzle

✓ Data illustrating the distributions of nasals

λ ɳəl ɡə nti ? kilə n bæntu

ʈə ndə n da təŋ ti ndo? ma ɳə n

nə rikə h sa mə n

ŋænde n ɳ ɳə irə mst mbə t inəm

ʈi mə k ɳ i mə ɳ ɳ iwa?

kə ɬit? ɳ iwa? ɳ æu r

✓ Relationship of a phoneme to its allophone

The researcher showing four diagrams which these it draw each nasal can be phoneme
or allophone. For top nasal means as a phoneme and down nasal as an allophone.

phoneme
\[ \eta \]
allophone
\[ \eta \ 
\[ h \ m \]

phoneme
\[ n \ m \]
allophone
\[ n \ 
\[ \eta \]
\[ m \]

For getting the result which one be phoneme or allophone the researcher continu
with start analyze the data procedure appropriate.

2. Analyze
✓ Determining the distribution of nasals
   Sorting the data

The researcher do data classification nasal’s follower appropriate so that easier to
know nasal appear on each stem or a word.

phonetic gloss phonetic gloss
\( \eta \) ʌ ŋs ʊ ‘cash back’ ɗa tə \( \eta \)
‘come’

mə ŋə n ɻ ‘eat’ mə ŋkə ? ‘rice cooked’

ŋændæŋ ‘ask’

\( \eta \) n ɪɾə m ‘a splash water’
\( \eta \) ɪ mə n ‘save’

\( \eta \) ɪ wə ? ‘ninth days funeral’

ŋi lə ? ‘angry’ ŋi mə ? ‘following’

n. go nə ti ɻ ‘change’ nʊ mə h
‘fuck’ pə nə tə ‘watch’ kɪlə n
‘weigh bowl’

nə rɪkə h ‘iron’

m. tɪ mə k ‘throw’ mə riə p ‘cook’
su mo r ‘well’ iŋə m ‘drink’
sə mə n ‘ship’

Listing the environment

The following stem structure above the researcher drawing nasal’s appears
environment. The researcher clasification environment with each nasal’s appear. For
hashtag symbol means nasal appear on word
initial or final positons.

Eliminating the redundant environments
The eliminating above showing that nasal ‘ŋ, n and m’ appear on all positions while nasal ‘ɲ’ has limited distribution is only appear on word initial and medial positions. Second, set of the data illustrates the distribution that their are phonemes.

5.3 Alternation phenomenon

This unit introduces alternation phenomenon in ɲəŋo-ɲəŋe dialect. This same phenomenon before the researcher focus on a segment. The researcher presenting an alternation impacting nasal consonant in ɲəŋo-ɲəŋe dialect. Such on nasal distribution the fact is nasal has restriction on their distribution. The researcher analyzing nasals through nasals prefixes alternation.

In ɲəŋo-ɲəŋe dialect found an alternation phenomena which alternation is a change consonant to be a nasal prefix.

According to Peng.2013 Alternation is a type of phonological phenomenon which a unit of meaning such as a root or prefix appear alternate when its pronounciation. In analyzing distributional problem in this case linguistic consider the forms that may or may not be semantically related.

The goals of this unit is introduces the phenomenon of phonological alternation which this unit designed to familiar with the characteristic of phonological alternation. And the researcher also showing an evidence those distribution and alternation has the similarities and differences.

5.3.1 Nasal alternation

1. The puzzle

Data illustrating an alternation in ɲəŋo-ɲəŋe dialect

精密 ɲəŋo-ɲəŋe dialect
Comparison of forms with or without prefix

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Prefixed form</th>
</tr>
</thead>
<tbody>
<tr>
<td>pa sa bl</td>
<td>mpa sa bl</td>
</tr>
<tr>
<td>di fa nsi bl</td>
<td>ndi fa nsi bl</td>
</tr>
<tr>
<td>ko nsi do rent</td>
<td>ndo k rent</td>
</tr>
</tbody>
</table>

According to the table above the researcher found that ‘1 m’ appear immediately before ‘p’, ‘1 n’ appear with ‘d’ and the last ‘1 n’ can appear with ‘k’.

According to (Peng, 2013, p.105) Alternation refer to one morpheme which it is an affix, root, stem or word has two or more phonetic forms.
(13) The table of Nasal assimilation without changes in ɲəo-ɲəŋ dialect

Such English prefix above the researcher showing some prefixes come from ɲəo-ɲəŋ dialect which prefix use nasal prefix. There are four prefixes use in ɲəo-ɲəŋ dialect such as ‘ŋ, n, ɲ and m’. Next the researcher invite for look at the under table.

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefixed</th>
<th>Sasak phonetic</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɲ ngso l</td>
<td>ɲ ndu</td>
<td>ɲ ngso l</td>
<td>People</td>
</tr>
<tr>
<td>Gæji</td>
<td>Gæj ɲ</td>
<td>Gæj ɲ</td>
<td>People</td>
</tr>
<tr>
<td>Ga de</td>
<td>Ga ɲ</td>
<td>Ga ɲ</td>
<td>People</td>
</tr>
<tr>
<td>gə ntu ?</td>
<td>gə ɲ</td>
<td>gə ɲ</td>
<td>People</td>
</tr>
<tr>
<td>kædu</td>
<td>k ɲ</td>
<td>k ɲ</td>
<td>People</td>
</tr>
<tr>
<td>susə h</td>
<td>susə ɲ</td>
<td>susə ɲ</td>
<td>People</td>
</tr>
<tr>
<td>je wo ?</td>
<td>je ɲ</td>
<td>je ɲ</td>
<td>People</td>
</tr>
<tr>
<td>cukp p</td>
<td>cuk ɲ</td>
<td>cuk ɲ</td>
<td>People</td>
</tr>
<tr>
<td>cəritə ?</td>
<td>cər ɲ</td>
<td>cər ɲ</td>
<td>People</td>
</tr>
<tr>
<td>so məp ?</td>
<td>so mə ɲ</td>
<td>so mə ɲ</td>
<td>People</td>
</tr>
<tr>
<td>tuluŋ tə o?</td>
<td>tul ɲ tə o?</td>
<td>tul ɲ tə o?</td>
<td>People</td>
</tr>
<tr>
<td>da təŋ tə dəo?</td>
<td>da təŋ tə də o?</td>
<td>da təŋ tə də o?</td>
<td>People</td>
</tr>
<tr>
<td>tujà ?</td>
<td>tu ɲ</td>
<td>tu ɲ</td>
<td>People</td>
</tr>
<tr>
<td>ma ɲa n</td>
<td>ma ɲa n ɲ</td>
<td>ma ɲa n ɲ</td>
<td>People</td>
</tr>
<tr>
<td>Pa ntu bəli bəntu</td>
<td>Pa ntu bəli bəntu</td>
<td>Pa ntu bəli bəntu</td>
<td>People</td>
</tr>
</tbody>
</table>

It can be seen from table above there are four variants prefixes those are (ŋ, n, ɲ and m).

Questions:

a. What are four sound above has relation phonological?

b. How to seek method relation variant itself?

c. Which from four variant to be UR?

d. What use rule for getting UR?

e. How to method for determine phonemes four variant prefixes?

2. Analyze

The researcher show nasal assimilation the data and saw that it above doing shape changes when followed or adding by suffix ‘peng, peny, pem and pen. The fact occur deletion process which this process would omit phoneme from word it when verb adding an affix and would change with suffix.

✓ (14) The distribution fourth prefixes with different phonetic forms

<table>
<thead>
<tr>
<th>ɲŋ</th>
<th>ɲŋŋ</th>
<th>ɲŋn</th>
<th>ɲŋm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>#a</td>
<td>#c</td>
<td>#t</td>
<td>#s</td>
</tr>
<tr>
<td>#g</td>
<td>#n</td>
<td>#j</td>
<td>#j</td>
</tr>
<tr>
<td>#k</td>
<td>#o</td>
<td>#i</td>
<td>#i</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ɲŋŋ</th>
<th>ɲŋn</th>
<th>ɲŋm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Post</td>
<td>#</td>
<td>#</td>
</tr>
<tr>
<td>Pre</td>
<td>#</td>
<td>#</td>
</tr>
</tbody>
</table>
According to the table above, all variants of prefixes have differences in environment and are predictable because the fourth variant has predictable environment, making predictability an argument that cannot be used for a phoneme determination and then it cannot be generalized into a rule of Nasal Assimilation. For that the researcher uses the second argument, which is simplicity, to get a phoneme.

Assumption 1: ‘pəŋ’ is a UR

For getting evidence that ‘pəŋ’ can be a phoneme, the researcher tries to collaborate with all nasals. The researcher uses ‘pəŋʌŋsʊl’ as an example in this assumption. Nasal ‘pəŋ’ changes to ‘pəɲ’ followed by c, s, j, n consonant.

1. pəŋ —→ pəŋ /___ c, s, j, n

   η —→ n /___ c, j, n

      (+ cons.)
                  (+ palatal)
               (+ cons.)
              (+ palatal)
                 (+ fricative)
               (+ velar)

   pəŋ/η is +nasal and +velar while pəŋ/n is +palatal for ‘c, j, n’; they are +palatal, -fricative and -glide

2. η —→ n /___ s

   (+ cons.)
   (+ palatal)
   (+ cons.)
   (+ alveolar)
   (+ voiced)

   For articulation ‘s’ not similarity with articulation ‘c’ until the researcher separated

   two these articulations articulation appropriate.

3. pəŋ —→ pəŋ/___ t, d

   η —→ n/___ t, d

      (+ cons.)
      (+ alveolar)
      (+ cons)
      (+ alveolar)
      (+ stop)

4. pəŋ —→ pəm/___ p, b, m

   η —→ m/___ p, b, m

      (+ cons.)
      (+ bilabial)
      (+ cons.)
      (+ bilabial)

   (15) Derivation process

<table>
<thead>
<tr>
<th>UR</th>
<th>/pəŋ-Λŋu l/</th>
<th>/pəŋ-ceko p/</th>
<th>/pəŋ-ιleg /</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>NA</td>
<td>pəŋ-ceko p</td>
<td>pəm-bəli</td>
</tr>
<tr>
<td>SR</td>
<td>[pəŋ-Λŋu l]</td>
<td>Not attested</td>
<td>[pəm-ιleg ]</td>
</tr>
</tbody>
</table>

We can see (5.3.1.1) that between four the data derivation just distribution ‘pəŋ’ can assimilation process while four not attested and doing deletion process so that they can be attested on their place of articulation appropriate.

Rule pəŋ is the phoneme:
Rule 2: 
\( \eta \rightarrow n \) — 2 rules
\( \eta \rightarrow m \) — 1 rule

The total score in \( p\eta \) rule is four rules

Assumption 2: ‘\( p\eta \)’ is a UR

5. \( p\eta \rightarrow \alpha, g, k, o, i, \eta \)

\( n \rightarrow \eta/\alpha \)

\[
\begin{align*}
+ \text{cons.} & \\
+ \text{palatal} & \rightarrow + \text{velar} \\
+ \text{glides} & \\
+ \text{voiced} & \\
\end{align*}
\]

\( + \text{syll} + \text{tense} + \text{back} + \text{low} \)

6. \( p\eta \rightarrow \eta/\iota \)

\( n \rightarrow \eta/\iota \)

\[
\begin{align*}
+ \text{cons.} & \\
+ \text{palatal} & \rightarrow + \text{velar} \\
+ \text{glides} & \\
+ \text{voiced} & \\
\end{align*}
\]

\( + \text{syll} + \text{tense} + \text{mid} + \text{back} \)

7. \( p\eta \rightarrow \eta/\t, d \)

\( n \rightarrow n/\t, d \)

\[
\begin{align*}
+ \text{cons.} & \\
+ \text{palatal} & \rightarrow + \text{alveolar} \\
+ \text{glides} & \\
+ \text{voiced} & \\
\end{align*}
\]

\( + \text{alveolar} + \text{stops} \)

8. \( p\eta \rightarrow \eta/\delta, p, b, m \)

\( n \rightarrow m/\p, b, m \)

\[
\begin{align*}
+ \text{cons.} & \\
+ \text{palatal} & \rightarrow + \text{bilabial} \\
+ \text{glides} & \\
+ \text{voiced} & \\
\end{align*}
\]

\( + \text{bilabial} + \text{stops} \)

(16) Derivation process

<table>
<thead>
<tr>
<th>UR</th>
<th>/( p\eta ) - n uku p/</th>
<th>/( p\eta ) - ga de/</th>
<th>/( p\eta ) - boli/</th>
<th>/( p\eta ) - tujá? /</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>NA</td>
<td>( p\eta ) - ga de</td>
<td>( p\eta ) - boli</td>
<td>NA</td>
</tr>
<tr>
<td>SR</td>
<td>[( p\eta ) - n uku p]</td>
<td>Not Attested</td>
<td>Not Attested</td>
<td>[( p\eta ) - tujá? ]</td>
</tr>
</tbody>
</table>

Rule \( p\eta \) is the phoneme:

\( n \rightarrow \eta \) — 4 rules
The total score for pən is six rules.

Assumption 3: ‘pən’ is a UR

\[
pən \rightarrow pən/ _\alpha \, g, k, o, i, \eta
\]
\[
n \rightarrow \eta/ _\alpha
\]
\[
\begin{align*}
+ \text{cons.} \\
+ \text{alveolar} \\
+ \text{nasal} \\
+ \text{voiced}
\end{align*}
\]
\[
\rightarrow
\begin{align*}
+ \text{velar} \\
+ \text{tense} \\
+ \text{back}
\end{align*}
\]
\[
\begin{align*}
+ \text{syll.}
\end{align*}
\]

\[
n \rightarrow \eta/ _g, k, \eta
\]
\[
\begin{align*}
+ \text{cons.} \\
+ \text{alveolar} \\
+ \text{nasal} \\
+ \text{voiced}
\end{align*}
\]
\[
\rightarrow
\begin{align*}
+ \text{velar}
\end{align*}
\]
\[
\begin{align*}
+ \text{syll.} \\
+ \text{tense} \\
+ \text{mid}
\end{align*}
\]
\[
+ \text{back}
\]

\[
n \rightarrow \eta/ _i
\]
\[
\begin{align*}
+ \text{cons.} \\
+ \text{alveolar} \\
+ \text{nasals} \\
+ \text{voiced}
\end{align*}
\]
\[
\rightarrow
\begin{align*}
+ \text{velar} \\
+ \text{tense}
\end{align*}
\]
\[
+ \text{syll.}
\]

10. pən → pən / _c, s, j, n

\[
n \rightarrow \eta/ _c, j, n
\]
\[
\begin{align*}
+ \text{cons.}
\end{align*}
\]
\[
\begin{align*}
+ \text{alveolar}
\end{align*}
\]
\[
\begin{align*}
+ \text{nasals}
\end{align*}
\]
\[
\begin{align*}
+ \text{voiced}
\end{align*}
\]
\[
\rightarrow
\begin{align*}
+ \text{palatal}
\end{align*}
\]
\[
+ \text{voiced}
\]
\[
+ \text{alveolar}
\]
\[
\rightarrow
\begin{align*}
+ \text{nasals}
\end{align*}
\]
\[
\begin{align*}
+ \text{voiced}
\end{align*}
\]
\[
+ \text{fricatives}
\]
\[
+ \text{affricative}
\]
\[
+ \text{palatal}
\]
\[
+ \text{voiced}
\]

11. pən → pəm / _p, b, m

\[
n \rightarrow m/ _p, b, m
\]
\[
\begin{align*}
+ \text{cons.}
\end{align*}
\]
\[
\begin{align*}
+ \text{alveolar}
\end{align*}
\]
\[
\begin{align*}
+ \text{nasals}
\end{align*}
\]
\[
+ \text{voiced}
\]
\[
\rightarrow
\begin{align*}
+ \text{bilabial}
\end{align*}
\]
\[
+ \text{voiced}
\]
\[
+ \text{fricatives}
\]
\[
+ \text{palatal}
\]

(17) Derivation process

<table>
<thead>
<tr>
<th>U</th>
<th>R</th>
<th>pən - tə o ?</th>
<th>pən - cuk ű p</th>
<th>pən - ma ŋ n</th>
<th>pən - kilo ŋ n</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>NA</td>
<td>pəŋ cuk ű p</td>
<td>pəm - ma ŋ n</td>
<td>pən - kilo ŋ n</td>
<td></td>
</tr>
<tr>
<td>SR</td>
<td>[pən -] (Attested)</td>
<td>[Attested]</td>
<td>[Attested]</td>
<td>[Not Attested]</td>
<td></td>
</tr>
</tbody>
</table>
Rule pən is the phoneme:

- n → ŋ — 4 rules
- n → ɲ — 2 rules
- n → m — 1 rule

The total score on pən rule is seven rules.

Assumption VI: pəm — phoneme

| n         ŋ         4 rules |
| n         ɲ         2 rules |
| n         m         1 rule |

15. Pəm → pəŋ/— i

16. Pəm → ɲ/— c, s, j, ŋ

17. Pəm → pəŋ/— t, d

(18) Derivation process

```
U /pəm- / pəm- / pəm- / pəm-
```
Rule pəm is the phoneme:

- m → [n] — 4 rules
- m → [ŋ] — 2 rules
- m → [n] — 1 rule

The total score on pəm is seven rules.

This argument using abbreviation word when showed place of articulation such as a consonant to be consonant and syllable be syllable. These using at symbol also like (+) the real on place of articulation while (-) meaning not until when the researcher putting symbol (-) on some word has meaning ‘’not’’. Like the under data the researcher using (-) on consonant ‘’y’’ which this consonant there is between two place of articulation are palatal and alveolar but will ‘’y’’ not palatal or alveolar until the researcher using symbol (-) as symbol for the second place of articulation.

According to phonological rule, the short and completed rule for all and having simple rule used to be a reference in application a rule.

While for four rules each has many scores total which for ‘’pəŋ’’ has six rules, ‘’pən’’ has seven scores rules, for ‘’pəm’’ has seven scores rules and ‘’pəŋ’’ has little score but can covering all rules use with score four scores rules. With the resulted those the researcher choose first application rule is ‘’pəŋ’’ for apply in this research because this is has simple size and completed used on all rules and following phonological rule.

(19). The table of nasal assimilation with changes in ñono-ñọng dialect

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Sasak phonetic</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>pə nọ</td>
<td>pəm</td>
<td>pəm-ŋ</td>
<td>Spectator</td>
</tr>
<tr>
<td>ti ndoʔ</td>
<td>Pən</td>
<td>Pə-ŋ</td>
<td>Sleeper</td>
</tr>
<tr>
<td>tujaʔ</td>
<td>Pən</td>
<td>Pə-ŋ</td>
<td>Pound tool</td>
</tr>
<tr>
<td>ta oʔ</td>
<td>Pən</td>
<td>Pə-ŋ</td>
<td>Skill/ability</td>
</tr>
<tr>
<td>Kædu</td>
<td>Pəŋ</td>
<td>Pə-ŋ</td>
<td>User</td>
</tr>
<tr>
<td>Kilowà n</td>
<td>Pəŋ</td>
<td>Pə-ŋ</td>
<td>Kilogram tool</td>
</tr>
<tr>
<td>cukɔ p</td>
<td>Pəŋ</td>
<td>Pə-ŋ</td>
<td>Complement t</td>
</tr>
<tr>
<td>sa op</td>
<td>Pəŋ</td>
<td>Pə-ŋ</td>
<td>Sieve</td>
</tr>
<tr>
<td>caritaʔ</td>
<td>Pəŋ</td>
<td>Pə-ŋ</td>
<td>Story teller</td>
</tr>
<tr>
<td>sọ mpaʔ</td>
<td>Pəŋ</td>
<td>Pə-ŋ</td>
<td>Fucker</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>kilowà n</td>
<td>Pəŋ-ilowà n</td>
<td>Kilogram</td>
</tr>
</tbody>
</table>

The goals of the data separate is for easier reader to understand alternate a cause use prefix on stem or not.

5.3.1.2 Consonant deletion

a. k → Ø / ŋ
The place of articulation consonant ‘k’ is velar and it’s manner of articulation is stop voiceless. The change for consonant ‘k’ is nasal ‘ŋ’ which it has the same place and manner of articulation.

5.3.1.3 Geminate deletion

Geminate deletion is the consonant deletion changed with consonant has same articulation with it.

The place of articulation consonant ‘k’ is velar and it’s manner of articulation is stop voiceless. The change for consonant ‘k’ is nasal ‘ŋ’ which it has the same place and manner of articulation.
The consonant ‘c’ would change by nasal ‘ɲ’ because has the same place of articulation is palatal.

c.  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>sə mpəʔ</td>
<td>Pəɲ -o mpəʔ</td>
<td>Fucker</td>
</tr>
<tr>
<td>sa ə p</td>
<td>Pəɲ -a ə p</td>
<td>Sieve</td>
</tr>
</tbody>
</table>

Like as consonant ‘c’ this consonant has the same place and manner of articulation are voiced palatal.

d.  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>tə ndoʔ</td>
<td>Pən- t ndoʔ</td>
<td>Sleeper</td>
</tr>
<tr>
<td>tujəʔ</td>
<td>Pən-ujəʔ</td>
<td>Pound tool</td>
</tr>
<tr>
<td>tə oįʔ</td>
<td>Pən-ə oįʔ</td>
<td>Skill/ability</td>
</tr>
</tbody>
</table>

For consonant ‘t’ has place of articulation voiceless alveolar stop and always change by voiced alveolar nasal.

e.  

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pə nto</td>
<td>Pəm-ə nto</td>
<td>Spectator</td>
</tr>
</tbody>
</table>

And the last consonant ‘p’ or called often with bilabial stop this consonant would change by nasal ‘m’ when the change experience on alternation phenomenon.

The fact the consonant deletion experience always changed by nasal until the researcher make a rule which this rule describe changed process on consonant to nasal.

The rule of consonant change to nasal

α nasal ——— Ø ——— α nasal ———

In (5.3.1.5) the researcher showed articulation deletion when their alternation. For clear, the researcher describing rule above with a sentence and hope for easier the reader on understood a rule structure.

The consonant ‘’k’’ deletion when meet with nasal ‘’ŋ’’ which this consonant is +velar on place of articulation with stops and –voiced on manner of articulation. While nasal ‘’ŋ’’ is +velar on place of articulation and nasal +voiced on manner of articulation.

The consonant ‘’c’’ deletion when appear with nasal ‘’ɲ’’. It is +palatal on place of articulation with –voiced and +affricative on manner of articulation. And nasal ‘’ɲ’’ is +palatal on place of articulation which on manner of articulation it is glides +voiced.

The consonant ‘’t’’ is +alveolar on place of articulation by means –voiced and +stops on manner of articulation. The consonant ‘’t’’ deletion when appear with nasal ‘’n’’ which this is alveolar on place of articulation and nasal +voiced on manner of articulation.

And the last consonant ‘’p’’ is +bilabial on place of articulation which it is –voiced and stops on manner of articulation. The consonant ‘’p’’ deletion when they appear together with nasal ‘’m’’ as bilabial in place of articulation and nasals on manner of articulation.

5.3.1.4 ‘pə’ prefix

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefixed</th>
<th>Sasak phonetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>romboʔ</td>
<td>pə</td>
<td>pə-romboʔ</td>
</tr>
<tr>
<td>lə mpoʔh</td>
<td>pə</td>
<td>pə-lə mpoʔh</td>
</tr>
<tr>
<td>ra pat</td>
<td>pə</td>
<td>pə-ra pat</td>
</tr>
</tbody>
</table>
For this prefix the researcher try to devide with nasal prefix for getting an evidence that it have corrolation with nasal prefix or not. The goal of this devide is the researcher want giving an exception on this session because this prefix not nasal prefix but it is independent prefix. The researcher analyzing with some assumptions.

Assumption: Pə phoneme

\[
\text{Pə} \rightarrow \text{n/ } \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
\]

20. Pə \(\rightarrow\) pə̃ \(\rightarrow\) c, s, j, n

\[
\text{Ø} \rightarrow \text{n/ } \_\_\_\_\_\_\_\_\_\_\_\_\_\_
\]

22. Pə \(\rightarrow\) pə̃ \(\rightarrow\) p, b, m

\[
\text{Ø} \rightarrow \text{m/ } \_\_\_\_\_\_\_\_\_\_\_\_\_\_
\]
+ bilabial

Rule ‘pə’ is a phoneme

Ø → η 4 rules
Ø → n 2 rules
Ø → n 1 rule
Ø → m 1 rule

The total rule for pə is eight rules

Like explained above that phonological rule use is the short, complete can include to all rules and the last has simple rule is use to be a reference in application rule.

**21. Derivation process**

<table>
<thead>
<tr>
<th>U</th>
<th>/pəlʌmpɔ h/</th>
<th>/pətu lɔŋ/</th>
<th>/pəlʌŋ sʊ l/</th>
<th>/pəbæntu/</th>
<th>/pəɛnɔ h/</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Attested</td>
<td>Not attested</td>
<td>Not attested</td>
<td>Not attested</td>
<td>Not attested</td>
</tr>
<tr>
<td>S.R</td>
<td>[pəlʌmpɔh]</td>
<td>[pəntu lɔŋ]</td>
<td>[pəlʌŋ sʊ l]</td>
<td>[pəmbæntu]</td>
<td>[pəɛnɔ h]</td>
</tr>
</tbody>
</table>

**5.3.1.5 Deletion process**

Deletion is a process of the disappearance of sound when pronounced. According to (O’grady, Dobrovolsky and Aronoff) deletion is a process that removes a segemental from certain phonetic contexts. Usually in English a schwa (ə) is often deleted when the next vowel in the word is stressed.

But in ŋəno-ŋənə dialect there are some are often deleted the researcher took some samples as an evidence that ŋəno-ŋənə dialect use deletion process. Like “pə ncukə p” become “pə n ukə p” consonant “c” deleted and changed by consonant nasal “n”.

Until the researcher found that there are five consonants are often deleted processes when the beforehand nasal which constonants those are “k, c, s, t and p”.

**5.3.1.6 Exceptional case**

There are four processes has similarity features on place of articulation and manner of articulation while for alveolar (s) be accepted rule because this feature has different place of articulation with articulation “c”. Actually determining process a phoneme or an allophone must has similarity on place of articulation.

Another example come from /pəŋʊ mpaʔ/ word which this example by using nasal “ŋ”. Nasal velar “ŋ” cannot assimilation to be palatal nasal “ŋ” “pə ŋ u mpaʔ?” because “s” sound is alveolar feature not palatal. Until deletion rule apply and consonant deletion [+ voiced] “s” after [+ voiced] “ŋ” be /pəŋʊ mpaʔ/ cannot attested in ŋəno-ŋənə dialect.

(22) Derivation process

<table>
<thead>
<tr>
<th>UR</th>
<th>/pəlʌŋ ʊsʊ l/</th>
<th>/pəcukʊ p/</th>
<th>/pəbæntu /</th>
<th>/pəɛntu l /</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>NA</td>
<td>pəŋʊ cuko p</td>
<td>pəmbæntu</td>
<td>pəɦʌntu</td>
</tr>
<tr>
<td>CN</td>
<td>NA</td>
<td>pəŋʊ kʊ p</td>
<td>NA</td>
<td>pəɦʌntu</td>
</tr>
<tr>
<td>SR</td>
<td>[pəlʌŋ ʊsʊ l]</td>
<td>[pəŋʊ kʊ p ]</td>
<td>[pəmbæntu ]</td>
<td>[pəɦʌntu]</td>
</tr>
</tbody>
</table>

The resulted of the rule above which Consonant Nasal Deletion (CND) rule appear after rule X appear because CND make it clear that deletion process occur on rule X until the data can be attested with Masbagik pronouncing appropriate.

**4. Comparison**
The researcher compared three arguments use in this research, which the research found the differences result. From three arguments used such as predictibility, simplicity and naturalness the researcher choose naturalness as a complete argument because it these has completed analyzing until getting the real result for found a phoneme.

The compared with two arguments are predictibility and simplicity in their rules resulting simple answer for a phoneme and has similarity resulted until can say that these rules cannot used for analyze a phoneme. The solution in this case the researcher using naturalness argument as the comparative result.

After the researcher made it a structural specifications phoneme appropriate with data above by using three types of linguistic arguments are predictibility, simplicity and naturalness.

a. Predictability

From the result above the researcher getting that prefix ‘pəŋ’ is a phoneme because it has simple and short rule appropriate with phonological rule.

b. Simplicity

Between fifth prefixes use on ɲəno-ɲəne dialect found simple rule on prefix ‘pəŋ’ only.

c. Naturalness

The third argument describe about derivation process which on Masbagik’s prefix use there are six derivations processes which each process the researcher putting in prefix. The researcher’s establish that assumption prefix ‘pəŋ’ is a UR or phoneme from fourth nasal prefixes are right. The researcher found that there are five delete processes when beforehand nasal prefix which consonant those are ‘k, c, s, t and p’.

5. Conclusion

In this case the researcher introduces case of phonology alternation involving ɲəno-ɲəne dialect, the researcher demonstrate this alternation how to ɲəno-ɲəne dialect method has an analysis process.

Top parts alternation phenomenon on ɲəno-ɲəne dialect is prefix which usually it as verb but changed when added prefix be noun as example ‘’A ηςο ɬ to be ρə η ηςο ɬ’’ on stem or root, ‘’A ηςο ɬ’’ is a verb changed to be noun ‘’ρə η-ɬ ηςο ɬ’’. Ρə η as a object on the word changed and this prefix has means noun.

This research using three arguments for getting underlying representation. The first argument the researcher using predictibility which a data can direct predictable when saw the data. The second argument is simplicity which the researcher using simple rule for found a phoneme is an assumption only. And the last is naturalness which it using feature in analysis process and in this argument processing contain such as the assumption, derivation process, deletion process.

The researcher compared these three arguments in the analysis of ɲəno-ɲəne dialect alternation and conclude that the second argument is simple but not affective and the researcher using the last argument is naturalness this argument is not only simple but also reveals the pattern in the data. The researcher expressed through one rule is ‘’ρə η’’ has six rules from prefix ‘’ρə η and ρə n’’ has each two rules and ‘’ρə m’’ has each one rule.
Towards the end of this case the researcher analyzes the problem which to be a phoneme from five prefixes for underlying representation and finally the concept of naturalness argument to be chosen.

And the last the researcher found that ‘pəŋ’ to be a underlying representation from fourth nasals because it use seven rules and has simple rule than fourth rules above while another fourth nasals be an allophone which these has purpose as a complementary if needed.

5.3.2 Voiceless obstruent fusion

Voiceless obstruent fusion is phonological process that occurs when nasal directly followed by voiceless obstruent.

1. The puzzle
✓ Fusion in ɲən̥-ɲən̥ dialect of sasakness

pʊɛʔ ?  pʊpɔʔ  pʊpɔʔ
kædu  kə pæk  kilowʌ n sʊwək
sʊ boʔ  sʊ diʔ  tɪ ndoʔ
tutɔ p  tʊlʌ k  cʊkʊ pʊɛ rɪtəʔ
ca  lʌʔ?

In under affixed form column the researcher not putting all of the data but selection for stems appear.

✓ (23) Stem adding affixed

<table>
<thead>
<tr>
<th>Stem</th>
<th>Affixed form</th>
<th>Glossary</th>
</tr>
</thead>
<tbody>
<tr>
<td>putəʔ</td>
<td>mutə ɭ ɭ</td>
<td>Whitening</td>
</tr>
<tr>
<td>pʊpɔʔ</td>
<td>mʊpɔʔ</td>
<td>Creambath</td>
</tr>
<tr>
<td>pʊpɔʔ</td>
<td>mʊpɔʔ</td>
<td>Washing</td>
</tr>
<tr>
<td>sʊ ɓoʔ</td>
<td>sʊ ɭ ɗiʔ</td>
<td>Conceal</td>
</tr>
<tr>
<td>sʊ ɗiʔ</td>
<td>sʊ ɭ ɗiʔ</td>
<td>Throw</td>
</tr>
<tr>
<td>Kædu</td>
<td>Dædu</td>
<td>Use</td>
</tr>
</tbody>
</table>

| kə ɭə k | ɭə ɭə k | Slap |
|kilowʌ n | ɭilowʌ n | Kilogram |
|cukʊ p | ɲ ɰʊkʊ p | Enough |
|ca rɪtəʔ | ɲə rɪtəʔ | Story |
|ca lʌʔ | ɲə lʌʔ | Ailayer |
|ti ndoʔ | nɪ ndoʔ | Sleep |
|tutɔ p | nʊtʊ p | Close |
|tʊlʌ k | nʊlʌ k | Go back |

a. In [kædu] and [kə toʌ n] (k) changed be fused to prefix [ɲ] in initial word.
b. In [ɲ ɰʊkʊ p] and [ɲ owæk] (c and s) changed be fused to prefix [ɲ] in initial word.
c. In [tukə r] and [nukə r] (t) in initial word is fused to prefix [n].
d. For [mʊpɔʔ] and [mʊpɔʔ] (p) in initial word is fused to prefix [m]

Consonants p, t, k, s and c fuse to nasal prefix which has similarities in place of articulation with them.

✓ (24) Place of articulation features of p, t, k, s and c

<table>
<thead>
<tr>
<th>p</th>
<th>t</th>
<th>k</th>
<th>s</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>+anterior</td>
<td>+anterior</td>
<td>- anterior</td>
<td>+anterior</td>
<td>- anterior</td>
</tr>
<tr>
<td>- coronal</td>
<td>+coronal</td>
<td>- coronal</td>
<td>+coronal</td>
<td>- coronal</td>
</tr>
<tr>
<td>-high</td>
<td>-high</td>
<td>+high</td>
<td>-high</td>
<td>+high</td>
</tr>
<tr>
<td>-back</td>
<td>-back</td>
<td>+back</td>
<td>-back</td>
<td>-back</td>
</tr>
</tbody>
</table>

✓ (25) Place of articulation nasal

<table>
<thead>
<tr>
<th>η</th>
<th>ɲ</th>
<th>n</th>
<th>m</th>
</tr>
</thead>
<tbody>
<tr>
<td>-anterior</td>
<td>-anterior</td>
<td>+anterior</td>
<td>+anterior</td>
</tr>
<tr>
<td>-coronal</td>
<td>-coronal</td>
<td>+coronal</td>
<td>-coronal</td>
</tr>
<tr>
<td>+high</td>
<td>+high</td>
<td>-high</td>
<td>-high</td>
</tr>
</tbody>
</table>
It can be saw that p, t, k, and c have the same place of articulation with respectively nasal [ŋ, ɲ, n and m] have features [+obstruent, -voiced, -continuant] although consonant [s] different have place of articulation but it have change be nasal [ɲ] same like consonant [c].

✓ Voiceless obstruent fusion

\[
\begin{align*}
&\text{+obstruent} \\
&\text{- nasal} \\
&\text{ŋ place} \\
\Rightarrow &\text{[αplace] /#} \\
&\text{+nasal} \\
&\text{[αplace]}
\end{align*}
\]

The following is derivation of [ŋɛ du]

**UR** /ŋ+kædų/

Voiceless obstruent fusion ŋædu

Vowel nasalization ŋædu

**PR** [ŋædu]

It can be saw that [ŋædu] has undergone two phonological rules which fuse /k/ and nasalized the vowel after [ŋ].

5.3.3 Glides Insertion

In this section the researcher introduced a phenomenon in ṭano-ţanẹ dialect. It is insertion glides phenomenon which is a type of phonological process which insert segment not present in the input. This research use Sasak Masbagik language as a illustrate insertion because in it is dialect have a process syllabel structure consonant insert in a word.

1. **The puzzle**

5.3.3.1 Consonant epenthesis in ṭano-ţanẹ dialect

(26) **Table of consonant epenthesis**

<table>
<thead>
<tr>
<th>Phonetic</th>
<th>Suffix</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liyo</td>
<td>liyow ƞ</td>
<td>Look</td>
</tr>
<tr>
<td>Bæwu</td>
<td>bæwuwə ƞ</td>
<td>Captured</td>
</tr>
<tr>
<td>ẹ ẹẹ</td>
<td>ẹ ẹẹ ŋ ŋ</td>
<td>Have</td>
</tr>
<tr>
<td>ẹẹ tæ</td>
<td>ẹẹ tæyə ŋ</td>
<td>Search</td>
</tr>
<tr>
<td>ẹẹ tẹ</td>
<td>ẹẹ tẹyə ŋ</td>
<td>Search</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọrowa ŋ</td>
<td>Some</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọliyə ŋ</td>
<td>Buy</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọbiyə ʌŋ</td>
<td>Chili use</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọ ẹy n</td>
<td>Foot use</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọlowa ŋ</td>
<td>Lengthen</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọ</td>
<td>Breastfed</td>
</tr>
<tr>
<td>ọ ọ</td>
<td>ọ ọ</td>
<td>Take</td>
</tr>
<tr>
<td>ɲẹpu</td>
<td>ɲẹpu</td>
<td>Brush off</td>
</tr>
<tr>
<td>ɲẹpu</td>
<td>ɲẹpu</td>
<td>Ready</td>
</tr>
</tbody>
</table>

From the data above has found that glides ‘y’ dan ‘w’ would appear if follow by vowel. In this case the researcher showing that ṭano-ţanẹ dialect always mean changing whey they followed by suffix.

On ṭano-ţanẹ dialect there some suffix use such as ‘ʌ ū’ dan ‘1 ū’ suffix which each it has mean itself. When a word on ṭano-ţanẹ dialect added a suffix then would mean change from word before attested example showed on ‘sə biyə’ ‘sə biyə-ʌ ū’ and ‘na ẹ’ ‘na ẹ -y-1 ū’ words which this words are noun and change be verb when they added a suffix because suffix ‘ʌ ū’ and ‘1 ū’ has meaning of verb.

For clear explain the researcher making a rule for establish both glides appear. Name of each vowels took from manner of articulation. For minus (-) symbol mean of no such under rule (-low).
2. **Analyze**

\[ \emptyset \rightarrow y / \epsilon, \ae, i \]

\[ \emptyset \rightarrow \begin{cases} 
+ \text{cons.} & + \text{syll} \\
+ \text{glides} & + \text{front} \\
+ \text{palatal} & - \text{low} 
\end{cases} \]

\[ \emptyset \rightarrow w / c, u \]

\[ \emptyset \rightarrow \begin{cases} 
+ \text{cons.} & + \text{syll} \\
+ \text{glide} & + \text{back} \\
+ \text{velar} & - \text{low} 
\end{cases} \]

The goals of allow (-low) on discussion for showing evidence that on ñono-ñone dialect not allow vowel appear on (low) position and could followed by both glides.

3. **Conclusion**

On this session showed insertion glides process on some words in ñono-ñone dialect. Glides (y) appear when it followed by front high and front mid vowel such as (i, \( \epsilon \) and \( \ae \)) vowels and glides ‘w’ just follow by back high and back such as (u and \( \varnothing \)) vowels.

5.3.4 Bə and Bər Prefix

1. **The Puzzle**

5.3.4.1 Prefix ‘bə r’

\( \text{bə rə ntu} \) \text{ bə rid} \text{p} \text{ bə row} \text{t} \text{ bə rə mə} \text{ bə rəpə} \text{ bə ritoŋ} \text{ bə rə} \text{ bə rə ma} \text{ bə rə ntu} \text{ bə ri nte} \)

5.3.4.2 Prefix ‘bə’

\( \text{bə tə nəŋ nə} \text{ bə kə dək} \text{ bə gətə} \text{ bə əc} \text{ t} \text{ bə pəsə} \text{ bə ləpə t} \text{ bə əc} \text{ nəŋ nə} \text{ bə rə} \text{ kə lə} \text{ bə rə} \text{ bə rə} \text{ pəsə} \text{ bə rə} \text{ tə nəŋ nə} \text{ bə rə} \text{ pəsə} \text{ bə rə} \text{ k} \)

\( \text{bə hə jə t} \text{ bə jərə t} \text{ bə ma ma} \text{ bə ən e} \text{ bə sə lə m} \text{ bə hə bə nə} \text{ nə} \text{ bə hə və m} \)

✓ **Comparison use and not use prefix in ñono-ñone dialect**

(27) **Table of Bə r and Bə prefix**

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Sasak ortographic</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruja k</td>
<td>Bə r</td>
<td>bə ruja k</td>
<td>Fruit salad</td>
</tr>
<tr>
<td>ū mbə ?</td>
<td>Bə r</td>
<td>bə rū mbə ?</td>
<td>Pickaback</td>
</tr>
<tr>
<td>iya k</td>
<td>Bə r</td>
<td>bə riya k</td>
<td>Breath</td>
</tr>
<tr>
<td>ura ?</td>
<td>Bə</td>
<td>bə rura ?</td>
<td>Giving pay</td>
</tr>
<tr>
<td>æt ?</td>
<td>Bə</td>
<td>bə æt ?</td>
<td>Have water</td>
</tr>
<tr>
<td>æntu ?</td>
<td>Bə r</td>
<td>bə æntu ?</td>
<td>Pull</td>
</tr>
<tr>
<td>æ mpt t</td>
<td>Bə r</td>
<td>bə æ mpt t</td>
<td>Sandbar</td>
</tr>
<tr>
<td>l nte</td>
<td>Bə r</td>
<td>bə l nte</td>
<td>Spy</td>
</tr>
<tr>
<td>æ ntok</td>
<td>Bə r</td>
<td>bə æ ntok</td>
<td>Add</td>
</tr>
<tr>
<td>ha jə t</td>
<td>Bə</td>
<td>bə hə jə t</td>
<td>Plan</td>
</tr>
<tr>
<td>jora ?</td>
<td>Bə</td>
<td>bə jora ?</td>
<td>Joke</td>
</tr>
<tr>
<td>ma ma ?</td>
<td>Bə</td>
<td>bə ma ma ?</td>
<td>Mother</td>
</tr>
<tr>
<td>nə nə</td>
<td>Bə</td>
<td>bə nə nə</td>
<td>Foot use</td>
</tr>
<tr>
<td>sa lə m</td>
<td>Bə</td>
<td>bə sə lə m</td>
<td>Say hello</td>
</tr>
</tbody>
</table>

(28) **Table of ñono-ñone of sasakness alternation**

<table>
<thead>
<tr>
<th>Stem</th>
<th>Prefix</th>
<th>Sasak ortographic</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruja k</td>
<td>Bə</td>
<td>Bə -ruja k</td>
<td>Fruit salad</td>
</tr>
<tr>
<td>ū mbə ?</td>
<td>Bə r</td>
<td>Bə r-</td>
<td>Pickaback</td>
</tr>
</tbody>
</table>
The researcher started from identification process such as insertion ‘r’, deletion, and then derivation processes.

**Analyze I:**

*Assumption 1: bə is the phoneme*

\[
\varnothing \rightarrow r / \text{u, o, i, t, æ, e}
\]

**a) Insertion ‘r’**

\[
\begin{array}{c}
+\text{cons} \\
+\text{liquid} \\
-\text{lateral}
\end{array}
\]

**Derivation process**

<table>
<thead>
<tr>
<th>UR</th>
<th>/bərənti ? /</th>
<th>/bərənti ɪŋkə ɪŋ /</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>bərənti ?</td>
<td>NA</td>
</tr>
<tr>
<td>SR</td>
<td>[bərənti ?]</td>
<td>[bərənti ɪŋkə ɪŋ]</td>
</tr>
</tbody>
</table>

**Analyze II:**

*Assumption 2: bə r is UR*

\[
r \rightarrow \varnothing / \text{r, h, j, m, n, s}
\]

**b) Deletion**

\[
\begin{array}{c}
+\text{cons} \\
+\text{liquid} \\
-\text{glide} \\
-\text{palatal}
\end{array}
\]

**Derivation process**

<table>
<thead>
<tr>
<th>UR</th>
<th>/bəripə r/</th>
<th>/bəripə ɪŋkə ɪŋ /</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Attested</td>
<td>Not Attested</td>
</tr>
<tr>
<td>Deletion</td>
<td>bəripə r</td>
<td>bəripə ɪŋkə ɪŋ</td>
</tr>
<tr>
<td>SR</td>
<td>[bəripə r]</td>
<td>[bəripə ɪŋkə ɪŋ]</td>
</tr>
</tbody>
</table>
All of the consonants occur deletion process but there are some consonants to be an exception in ṇano-ṇone dialect are consonant ‘γ, η and η’.

5.3.4.3 Schwa insertion

Schwa insertion is process schwa insertion on a word which it as intermediate between prefix and stem.

<table>
<thead>
<tr>
<th>Rule</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>🆎</td>
<td>bə-ʁæɣəŋ → bə-ʁæɣəŋ ə s → bə-ʁæɣəŋ s</td>
</tr>
<tr>
<td>rɪ m</td>
<td>bə-ʁæɣəŋ → bə-ʁæɣəŋ m → bə-ʁæɣəŋ m</td>
</tr>
<tr>
<td>tə s</td>
<td>bə-ʁæɣəŋ → bə-ʁæɣəŋ s → bə-ʁæɣəŋ s</td>
</tr>
<tr>
<td>ɡə h</td>
<td>bə-ʁæɣəŋ → bə-ʁæɣəŋ h → bə-ʁæɣəŋ h</td>
</tr>
</tbody>
</table>

For this case the researcher analyze by using constraint until the researcher getting the result both prefixes just allow vowel has similarity feature with it because in ṇano-ṇone dialect not allow a word has consonant prefix such as ‘b and r’ followed by anything vowel except vowel has same feature with them.

In this case the researcher by using three rules for identifying the data are first predictability, second simplicity and the third naturalness. The purpose of these rules are for getting the complete resulted.

✓ Predictability

On these analysis the researcher found in ṇano-ṇone dialect more use open syllable just than with close syllable. Open syllable is not follow by consonant stop and close syllable vise versa with open syllable, there are seven shape consonants stops according to place of articulation such as consonant ‘p, b, t, d, k, g, ʔ’. For example from open syllable such as ‘bəɔjɔʔ’ which consonant ‘j’ not consonant stop and close syllable like ‘bəpisə’ which consonant ‘p’ is consonant stop.

Both prefixes can prediction through vowel and consonant follow. Prefix was ‘bə’ always followed by consonant and then prefix ‘bə’ was followed by vowel.

✓ Simplicity

ⁿano-ṇone dialect does not allow a word to be monosyllable and it inclined on the use of bisyllable because every Sasak Masbagik word always adds prefix as a complement, so one syllable can change to be two syllables or more familiar with bisyllabic.
Naturalness

For this case the researcher analyze by using constraint until the researcher achieved the result both of the prefixes that just allow vowel that had similar feature with them because ṇonono-ŋone dialect did not allow a word that had consonant prefix such as ‘b and r’ were followed by anything vowel except vowel that had same feature with them.

3. Conclusion

The researcher introduces other prefixes used in ṇonono-ŋone dialect which prefix that was used by Masbagik people that there were two prefixes. Other nasal prefixes were ‘bə and bər’. Both had each function and follower which prefix ‘bə’ was followed by all of consonant but had the exception for some consonants in ṇonono-ŋone dialect such as (f, q, v, x, y and z). This occurred because these consonants were not used by Sasak Masbagik people because they never appeared in utterance and ‘bər’ was followed by all of vowels without exception. Although both prefixes had certain follower, but in this session the researcher found additional case with two words which it was just followed by vowel that had same feature with them.

Conclusion

This research has five chapters which are the first chapter, second chapter, third chapter, fourth chapter and fifth chapter. The researcher introduced background of the study on this research and then the researcher drew the general and specific way of the researcher’s thought. Identification of research problem presents variable used during the research on a syllable. The researcher presented some cases in this research. There were two significant of the study and they were theoretical significant and practical significances where the researcher mentioned sub variables used in this research such as syllable, distribution and alternation on research scope. The last operational definition on this stage was that the researcher gave explanation concerning variable applied by the expert.

The second chapter contains of two variables such as review of related studies which the researcher took a sample from Jadena’s thesis by Boso Walikan title and Thalia, theoretical concepts. In this session the researcher showed variable concept from phonology part. And then, the last one was a theoretical framework which consisted of variable concepts.

The third chapter consists of research approach, research variable, population, sampling technique, techniques collecting procedure, data analysis procedure and research design. In the research approach, the researcher used descriptive qualitative. In this stage, the researcher used a direct research for getting the real data and Husni Muadz’s students assignment as supporting data. In the research variable, the researcher used two variables: distribution and alternation phenomenon. And then, The researcher did not take all population in Masbagik but the researcher selected them based on the productive and non productive age of Masbagik people between 15 to 64 year old with degree 65, 039% as productive while non productif with 65+ year old with the sum 5, 098%. For sampling technique, the researcher did not take all of speech utterance. The reason to take the small population was that the researcher thought that all of Masbagik people had similar utterances in a word until small population that can be representative of big
population. And techniques of collecting procedure applied direct research which it merely focused on the several related research variables to solve the problems appearing in the research by using deep analysis. This research was a descriptive qualitative in which the researcher attempted to describe the phenomena occurring in the area of research. Usually, collecting data was taken from family, school, and environment. The researcher did not use a test procedure but the researcher used recording and note taking. Data analysis procedure obtained data during the research time processed by conducting some steps which started from identifying with phonetic application contain of phonetic transcription after that the researcher continued with classifying the appropriate data. Then, the researcher defined or described the data, presented the data and concluded the finding or evaluation.

In the fourth chapter, the researcher drew some problems coming from two research variables. After the researcher had done direct research, the researcher found some processes on distribution and alternation phenomenon. The researcher showed how to analyze, to find the data and to present by the result. This chapter consists of identification sounds (vowel identification and consonant identification), syllable distribution, vowel and consonant distribution, and alternation phenomenon.

The researcher found that ɲəɲo-ɲəɲ dialect did not have five vowels but it had eleven vowels. Eleven vowels were combination between five vowels with vowel variant which each vowel had one variant except ɛ vowel that had two variants. On other hand, the researcher found ten consonants such as labial, alveolar, palatal, velar, glottal stop, nasal homorganic, liquid, nasal, pə prefix, bə and bər prefixes.

In addition, the researcher found six phonological process such as nasal assimilation, consonant deletion, geminate deletion, voiceless obstruent fusion, glides insertion, schwa insertion.

The researcher used procedure to establish the phonological rules with two approaches: rule approach and templatic approach. The researcher used processes of syllabification with certain CV (consonant vowel). This process used three types of syllables: initial, medial and final until maximal syllable appear CCCVC on stro m word.

The study of phonology gives high benefit when people want to know about production sounds because it is how it investigates sounds in discriminatory and a social function. The discriminatory function means of distinguishing one sequence of sounds such a word, sentences and text from another different meaning.

Then, a social function role uses syllable, word, word’s combination and sentence. The study of phonology teaches how to use phonetic symbol which it describes place of sound production on sound organism.

The researcher’s suggestion for teachers and other people when they are interested in knowing good pronunciation is to understand about phonological study. From this research the teacher introduced sounds production on human organ and the teacher also explained that phonological study not only for English language but also for all languages including their languages because they can find phenomena and the way of getting the result with simple method.
When the teacher expect their students to succeed in using language, they should introduce study with phonology because the students are easier to understand the use and application of their language.

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