# BOLANO LANGUAGE PHONOLOGY SYSTEM 

## (SISTEM FONOLOGI BAHASA BOLANO)

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#### Abstract

Research reviewing of System Phonolgy Language Bolano. The problem in this research is how the Bolano phoneme system? The purpose of this study was to describe the Bolano language phoneme system. The method used in this research is descriptive qualitative method. Data collection techniques in this study are a direct ability, field recording and recording. Direct skills are a technique of data selection through conversations between researchers and informants. Implementation of this technique is done by way of direct question and answer between with guided by research instrument. Direct technique is used to find out directly the Bolano language phonemes. Field recording techniques are used to record the context of useful utterances to interpret the data obtained. While the recording technique in this study was conducted with the aim to obtain the actual data, in the form of Bolano language phonology. Phase analyzing data using data reduction methods, data presentation, and inferences. Based on collected data, the data obtained phonetic data, indicating the sound of language sounds that amounted to 25 it consists of 5 vocoids and 20 konloids. In Bolano language there is a word consisting of a vocoid series, like the word ue which means rattan and he which means this. Historically such a vocoid series is seen as a sincope, ie the removal of the controtic sound in the middle of a word. From the discussion of the distribution of controversies and pairs of contrasts of dubious doubts can be inferred that the 20 Bolano-language cones, 19 segments of phonemes and sat segments are allophones. The allophone is [v] whereas the 19 phonemes are [p] [b], [t], [d], [c], [j], [k], [g], [?], [s], [h], [m], [n], [n], [ n$],[\mathrm{l}],[\mathrm{r}],[\mathrm{w}]$, and [y].


Keywords: Phonology, Bolano language


#### Abstract

Abstrak

Meninjau penelitian tentang "Sistem Fonologi Bahasa Bolano". Masalah dalam penelitian ini adalah bagaimana sistem fonem Bolano? Tujuan dari penelitian ini adalah untuk menggambarkan sistem fonem bahasa Bolano. Kaedah yang digunakan dalam penelitian ini adalah metode deskriptif kualitatif. Teknik pengumpulan data dalam penelitian ini adalah kemampuan langsung, perekaman lapangan dan pencatatan. Keterampilan langsung adalah teknik pemilihan data melalui percakapan antara peneliti dan informan Implementasi teknik ini dilakukan dengan cara tanya jawab langsung antara dengan dibimbing oleh instrumen penelitian. Teknik langsung digunakan untuk mengetahui secara langsung fonem bahasa Bolano. Teknik perekaman lapangan digunakan untuk merekam konteks ucapan yang berguna untuk menginterpretasikan data yang diperoleh. Sedangkan teknik perekaman dalam penelitian ini dilakukan dengan tujuan untuk memperoleh data aktual, dalam bentuk fonologi bahasa Bolano. Fasa menganalisis data menggunakan metode reduksi data, presentasi data, dan kesimpulan. Berdasarkan data yang terkumpul, data


#### Abstract

tersebut memperoleh data fonetik, yang menunjukkan bunyi bunyi bahasa yang berjumlah 25 itu terdiri dari 5 void dan 20 konloid. Dalam bahasa Bolano ada kata yang terdiri dari seri void, seperti kata ue yang berarti rotan dan he yang berarti ini. Secara historis, vocoidseries semacam itu dipandang sebagai suatu ketulusan, yaitu penghapusan suara kontrotik di tengah kata. Dari diskusi distribusi kontroversi dan pasangan kontras keraguan meragukan dapat disimpulkan bahwa 20 kerucut bahasa Bolano, 19 segmen fonem dan segmen sat adalah alofon. alofonnya adalah [v] sedangkan 19 fonemnya adalah $[p],[b],[t],[d],[c],[j],[k],[g],[?],[s],[h],[m],[n],[n],[\eta],[l],[r],[w]$, dan $[y]$.


Kata kunci: Fonologi, babasa Bolana

## INTRODUCTION

Language is a symbolic system in the form of sound that arbitrary used by a speech community to cooperate, communicate and identify them. In Indonesia there are various tribes and languages, including Javanese, Sundanese, Madurese, Balinese, Bugis, Makassar, Mandar, Manado, Kaili, and many other languages as well as ancestral heritage which must be maintained and developed. One of the languages in Indonesia especially in Central Sulawesi is Bolano, precisely in Bolano Village, Bolano District, Parigi Moutong, approximately 306 km from Palu. The language of Bolano is also referred to as the mothertongue, because it is used as the first language by native speakers. It also resembles the Toli-Toli language, but these two languages are different languages. In Bolano village, the language of Bolano is used as a daily means of communication by the people and is also used as an introduction in performing traditional ceremonies. The above explanation is a general description of the existence of Bolano language, while the main focus discussed in this research is how the Bolano language phonology system. In connection with the focus, this research is done as a real action in the preservation of local language which is one of the Indonesia's wealth that must be maintained and preserved. On the other hand, this research is conducted for the development of science in the academic field, especially linguistics. This linguistic study is confronted with the Bolano language phonology system as a scientific application in the field of language to know the level of the phonology of Bolano language as the phonological system of local languages of Indonesian archipelago, so that this research finding can act as a comparison of the phonological system.

The Bolano language has five vowel sounds namely $/ \mathrm{a} /, / \mathrm{i} / \mathrm{l} / \mathrm{u} /$, /e/, and $/ \mathrm{o} /$, and has 18 consonant sounds namely/b/, /c/, /d/, /g/, /h/, /j/, /?/, /k/, /l/, /m/, /n/, /p/, /r/, /s/, $/ \mathrm{t} / \mathrm{s} / \mathrm{v} / \mathrm{s} / \mathrm{w} / \mathrm{dan} / \mathrm{y} /$. In Bolano there are some words that have ambiguous meanings, for example the word inda can mean where or also debt, the word maalom can mean bungry or also in, the word saana can be interpreted as pants or also there. Departing from these problems this research is considered important to be studied scientifically to obtain the Bolano language phonology system and provide information on the results of the study of similarities or differences in phonological systems with local languages in the Indonesian archipelago and even languages of foreign countries. The Bolano language as one of the local languages in Central Sulawesi must be preserved by means of research as a form of documentation for the generation of Bolano language speakers in particular, as well as observers of the linguistics, to know the language of Bolano especially the phonology system. In addition, the local language as an ancestral heritage that must be maintained preserved and developed its existence so as not to experience extinction even though the dialect is still used but a shift will gradually occur due to the occurrence of language contact in everyday communication. The statement provides concrete evidence that it is worthy to be studied as the development of regional languages, especially about the language structure which is a particular aspect that provides its own style for linguistic theory, especially linguistics in Indonesia. Thus, the speakers of regional languages will get to know the diversity of languages under the auspices of Bhineka Tunggal Ika.

## LITERATURE REVIEW

Muslich (2012) suggests that language is a symbolic system of sound that arbitrary used by a speech community to cooperate, communicate and identify them. Language as a system, formed by a rule or certain patterns either in the field of sounds, word order, or sentence form. If these rulesor patterns are violated, they may disturb the communication process. Therefore, the understanding of the sound concept must be mastered by both speaker and writer so that the written or delivered language can be accepted and understood the meaning by the listener or reader. The main function of language is as a tool to cooperate or communicate in people's lives Muslich (2012). This understanding emphasizes that the main function of language is to communicate among peoples. There are four functions of language, namely: a) a tool for self-expressing. Language is everything that is implied in our feeling and mind, at least, to convey our desires; b) a communication tool. Language is a formulation channel of intent which gives birth to feelings, ideas, and allows for cooperation and interaction between individuals; c) the tool of interaction. Language is one of the elements of culture that allows people to utilize their experiences, to learn and to take part in the experience, and learn to get acquainted with others; d) the instrument of social control. Language is a tool used in an attempt to influence the behaviour of others. Language also has a relationship with the socialization process of a society.

Phonology is a grammatical or linguistic department that analyzes the sound of language in general. According to Pateda (2011), phonology is a science that examines the sounds of a particular language according to its function to distinguish lexical meaning. Then on the same basis, it is differentiated into phonetic and phonemic notions. Phonetics and phonemics both belong to the field of phonology. Clark \& Yallop (2012) stated that phonetics is a field that is closely related to the study of how humans speak, hear, and process received speech, while phonemics can be defined as the smallest unit of language that is functional, meaning that the phoneme unit has a function to distinguish meaning. Furthermore, Muslich (2012) also stated that the phoneme is the smallest unity of language that serves to distinguish meaning. Speech is a term that is directly related to the sound of the language. The sounds of language are the sounds produced by the human speech tool to form the speech. Sound as an element of language is the sounds that make up the word. The language sounds consist of vowels, consonants, and diphthongs.

The phonemic narrative can be defined as the depiction of the smallest functional unit of language, meaning that the phoneme unit has a function to distinguish meaning. Vowels are sounds of a language whose air currents did not encounter any obstacle, so there is no articulation. Obstacles on the formation of vowels are not on the sound of vocals but only on the vocal cords that are commonly called articulation (Verhaar 1989). In Indonesian there are 5 vowels: /a/, /i/, $/ \mathrm{u} / \mathrm{l} / \mathrm{e} /$, and /o/. Consonants are sounds that when produced encounter obstacles in a particular articulation area. Verhaar (1989) suggests that the consonant is the sound produced by using articulation on one part of speech tools. The obstacles encountered by the air can be entirely all or can be partial by shifting or stirring the air currents. In Indonesian there are 21 consonants: /b/, /c/, /d/, /f/, /g/, /h/, /j/, /k/, /l/, /m/, /n/, /p/, /q/, /r/, /s/, /t/, /v/, /w/, /x/, /y/, and /z/.

Muslich (2012) argued that syllable means the wording of a word based on the phoneme structure of the language in question. To understand this syllable, linguists or phonetics are based on two theories, namely (1) the sonority theory, this theory explains that a series of voices of language voiced by speakers always have peak filtering (sonority) between evaporated sounds. This loudness is characterized by a pulsating chest that causes the lungs to push the air out. (2) Prominence theory. This theory focuses on the combined sonorities and suprasegmental aspects, especially the juncture. When the series of sounds is spoken, in addition to sound loudness unit, there is also a pause between them, namely silence before and after the loudness peaks.

## Phonetic Description of Bolano Language

The phonetic data obtained as listed in the transcription above indicates the existence of 25 Bolano language sounds, 5 vocoids and 20 contoids.

## Vocoids of Bolano Language

The parameters used to organize Bolano vocoids are (1) the position of the tongue, which can be divided into three parts: high [i, u], medium [e, o], and low [a]. (2) The position of the lower jaw which produces three articulation points ie front [i, e], middle [a], and back [o, u]. (3) Lips, which can be divided into two kinds namely, spherical $[\mathrm{o}, \mathrm{u}]$, and non-spherical [i, e, a]. Based on the above parameters the five Bolano vocoid sounds found can be formulated in the table 1 below.

Table 1. Vocoids of Bolano Language

|  | Non-Spherical |  | Spherical |
| :--- | :---: | :---: | :---: |
|  | Front | Middle | Back |
| High | i |  | u |
| Medium | e |  | o |
| Low |  | a |  |

In the table above, it can be seen that there are five Bolano vocoid sounds, consisting of two front vocoids, two rear vocoids, and one middle vocoid. In its distribution, the five vocoids are in the initial position of the word, the middle of the word, and the end of the word. As the presented data in the following table 2.

Table 2. Vocoids Distribution of Bolano Language

| Vocoid | Front Position |  | Middle Position |  | Rear Position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bolano | Indonesian | Bolano | Indonesian | Bolano | Indonesia |
|  | Languae |  | Language |  | Language | n |
| [i] | Iya | Ini | siinda? | dimana | nabai | Jadi |
|  | Init | Panas | Situ? | Disitu | untudi | Antar |
|  | Inna | Nenek | Pitu | Tujuh | Tatusi | Datangi |
| [e] | - |  | Pelesi | Tampar | naate | Mati |
|  | _ |  | Bega | Banyak | Kate? | Gatal |
|  |  |  | Kena | Jangan | Kede? | Ketiak |
| [a] | Ala? | Ambil | Cau | Kamu | Seena | Mereka |
|  | Ana | Itu | Sattu | Sabtu | Timbala | Janda |
|  | Ane | Jika | Maako | Pergi | Timba | Tebu |
| [o] | Ondo | Hari | Soi | Siapa | Ogo? | Air |
|  | Opusan | Habiskan | Moolop | Besok | Jïpo | Belum |
|  | Opat | Empat | Poboian | Jual | Mopido | Bagus |
| [u] | Udan | Hujan | Gauan | Kebun | Motur | Tidur |
|  | Utas | Adik | Nau?an | Turunkan | Sompuи | Sepuluh |
|  | Untudan | Antarkan | Sauan | Depan | Pogutu | Membuat |

Based on the data in the table above, there is a combination of vocoid with each other that embodies the vocoid series, whether in the form of a vocoid series of a kind or a series of vocoid that are not similar. This kind of vocoid sequence is phonetically similar to the long vocoid. For example, words can be found, such as toolu (one), maalom (hungry), saana (pants), seena (them), and taamoko (turns). The above exposure shows a similar series in the middle of the word realizing a rising upward tone like seena (them). This form illustrates that the two vocoids each have their own accents and each one is a group of the smallest rhythmic unit in the speech currents. In the Bolano language, the five vocoid embodies 25 kinds of combination (vocoid series). In this study, everything which has been found is listed in table 3 below.

Table 3. Vocoid Sequence

| $\begin{aligned} & \text { N } \\ & \text { To } \\ & \text { O} \\ & 0 \end{aligned}$ |  | Vocoid 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | i | e | a | O | u |
|  | i | ii | ei | ai | Oi | ui |
|  | e | ie | ee | ae | oe | ue |
|  | a | ia | ea | aa | oa | ua |
|  | 0 | io | eO | ao | OO | uo |
|  | $\mathbf{u}$ | iu | eu | au | Ou | uu |

In different vocoid series (between two vocoids) there is a transition sound or a gliding sound insertion of $[\mathrm{y}]$ and $[\mathrm{w}]$. In its distribution, the above vocoid sequences are in the initial positions of the word, the middle of the word, and the end of the word. The position can be seen in the table 4 below.

Table 4. Dissimilar Vocoid Sequence

| Vocoid Sequence | Bolano Language | Indonesian |
| :---: | :---: | :---: |
| -ia | sia | dia |
| -ua- | buaya | buaya |
| eo- | eon | kerang kecil |
| -io- | biod | telur ikan |
| -ua- | tuai? | adik. |

This vocoid series also exist as a word. In other word, in Bolano Language there is a word consisting of a vocoid series, like $u e$ (rattan) and $i a$ (this). Historically such a vocoid series is seen as syncope which is the removal of the contoid sound in the middle of a word.

## Contoids of Bolano Language

According to the obtained data, there are 20 contoids in Bolano Lannguage. The contoids consist of [p], [b], [t], [d], [c], [j], [k], [?], [g], [s], [h], [m], [n], [n], [ n$],[\mathrm{l}],[\mathrm{r}],[\mathrm{v}],[\mathrm{w}]$, and [y]. The contoids are represented by parameters comprising (1) the articulation point (2) the vocal cord state and (3) the articulation requirements. Based on the parameters mentioned earlier, Bolano language contoids are arranged in table 5 as shown below.

Table 5. Contoids

| Articulation <br> Requirements |  | Articulation Points |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Labial | Dental/ <br> Alveolar | (Alveo- <br> Palatal | Velar | Glotal |
| 1 Blocked b | tb | p | D | c | k | ? |
|  |  | b | T | j | g |  |
|  | tb |  | S |  |  | h |
| 2 Frikatif b |  | v |  |  |  |  |
| 3 Nasal b |  | m | N | n | $\eta$ |  |
| 4 Lateral liquid |  |  | L |  |  |  |
| 5 Retoflex Liquid |  |  | R |  |  |  |
| 7 Semivocoid |  | w |  | y |  |  |

Additional explanation : tbis silent/not sounded, while $b$ is voiced/sounded.
In the chart above, it is noted that the Bolano language consists of 20 contoid sounds divided into (1) the nine stop sounds which is the silent bilabial stop [ p ], the voiceless apico-dental nox $[t]$, the silent lamino-platal [ c$]$, silent dorso-velar $[\mathrm{k}]$, silent glottic stop [?], voiced bilabial stop [b], voiced apico-alveolar stop [d], voiced lamino-platal [j]; and (2) three fricative sounds, the silent
alpico-alveolar fricative [s], silent glottal fricative [h], and voiced bilabial fricative [v]; (3) four nasal sounds, nasal bilabial [m], nasal alveolar [ n$]$, nasal platal $[\mathrm{n}]$, and nasal velar [ n$]$; (4) two Liquid sounds, lateral apico-alveolar [1], and retoflex apico-alveolar [r]; and (5) two semivocoid sounds, which are bilabial semivocoid [w], and lamino-platal semivocoid [y].

The contoids is present in all positions, either at the beginning of the word, the middle of the word, or the end of the word. There are contoids that only found on the first position of the word and the middle of the word, and also is in the middle of the word and the end of the word, as shown by the data in table 6 below.

Table 6. The Contoid Realization of Bolano Language

| Contoid | Front Position |  | Middle Position |  | Rear Position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bolano <br> Language | Indonesian | Bolano <br> Language | Indonesian | Bolano Language | Indonesian |
| P | Paya | Pepaya | Opat | Empat | Moolop | Besok |
|  | Pa?a | Paba | Kampini | Ketupat | Lakop | Tangkap |
|  | Paki | Luka | Tatapi | Cuci | Kokop | Peluk |
| B | Badu | Baju | Tobok | Tombak | Longkab | Kelapa Kopra |
|  | Bega | Banyak. | Bobog | Nanab | Kiloeb | Selam |
|  | Bau? | Babi | Bibi | Bibir | - | - |
| T | Teeng | Teh | Ontoug | Telur | Kokot | Gigit |
|  | Tau | Orang | Naate | Mati | Pikot | Lalat |
|  | Tinga?an | Pacar | Rante | Kalung | Maba?at | Berat |
| D | Doa? | Dua | Sedde | Sedikit | Soyod | Iris |
|  | Dako | Besar | Dadaan | Jalan | Biod | Telur Ikan |
|  | Dila? | Lidab | Nidau | Diusir | Tuad | Surat |
| C | Cau | Kamu | Kaca | Gelas | - | - |
|  | Cole | Kutang | Kaca | Kacang | _ | - |
|  | - | - | - | - | - | - |
| J | Jiija | Tidak | jïja | tidak. | _ | _ |
|  | Jangku? | Janggut | Kajaran | Kuda | _ | _ |
|  | Jaade? | Tidake ada | Kinjapi | Kedip | - | - |
| K | Kuku? | Kaki | Konuku | Kuku | Bookak | Bau busuk. |
|  | Koode | Ada | Kaykayay | Layangan | Nosu?uk | Marab |
|  | Kede? | Ketiak | Maako | Pergi | Siok. | Nyamuk. |
| G | Gooti | Pegang | Ogo? | Air | Niug | Kelapa |
|  | Gata | Karet | Mogoat | Menunggu | Kaa?ug | Kunyit |
|  | Gua? | Gula | Naga? at | Cerai | kukug | garuk |
| S | suang | isi | pasangan | pasang | didis | Diuris |
|  | Saa?ig | Sisir | masara | gelisah | mannas | Pedis |
|  | soyom | Semut | mokosua | keasiban | Momi? is | Manis |
| H | bandu | Handuk | mobui | pulang | - | - |
|  | Hedde? | Sedikit |  | Jatuh | - | _ |
|  | bunut | sabut | Kuabu? | Panu | - | - |
| M | manuk | ayam | mamanuk | burung | matanom | menanam |
|  | Maga?an | Makan | kosoomi | diingat | maalom | Lapar |
|  | Maala? | Bisa | maamag | sungai | mokuom | Dingin |
| N | naate | mati | mannas | pedis | panganan | Nasi |
|  | niita | dilibat | Manau? | Turun | baun | Bekal |
|  | Nasa? | Salab | moinit | panas | gauan | Kebun |
| n | nawa | Nafas | ponno?o | pengikat | - | - |
|  | - | - | mопи?и | Melamar | - | - |
|  | - | - | manani | bernani | - | - |
| $\bigcirc$ | - | - | maykoo | capek | Mata? a | Jaub |
|  | - | - | Maya? ${ }^{\text {a }}$ | makan | pigij | parang |


|  | looyangi | baskom | moninum Maala? | Minum Bisa | suay noibagil | Isi <br> terjerembab |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L | Laalayaa | Terbang | maalaya | nama ikan | kikil | gigit |
|  | Lagu? | Suara | malea | Lemab | bukil | gunung |
| R | rampa | bumbu | Marame | Ramai | sanggar | Pisang |
|  |  |  |  |  |  | goreng |
|  | Rante | Kalung | kadera | keursi | nasadar | Sadar |
|  | rasung | racun | marasa | lucu | iluar | Di luar |
|  | Vuta? | Tanab | yuvus | diatas | - | - |
| V | Vuan | Bulan | makavu | Kelabu | - | - |
|  | vuta | buta | - | - | - | - |
|  | wakat | Akar | sawa | ular | - | - |
| W | wase | besi | Kawa? | Kawat | - | - |
|  | wati | tungou | - | - | - | - |
|  | Yaku? | Saya | soyom | semut | - | - |
| Y | yaung | dibawah | baayang | Ombak | kombunoy | sereh |
|  | yopung | tuban | kayad | Tepung sagu | - | - |

There are five kinds of contoids sequence found, namely [mb], [nd], [nj], [ng], and [ ng ]. This sequence of contoids does not include or is unlike the affricates of solid sound and consonant group clusters. Affricates and clusters each have only one sound, while the existing contoid sequences in Bolano language is a combination of two contoids, a nasal that combines with the same stop sound as the articulated point as shown in the table 7 below.

Table 7. Contoid Sequence

|  |  | Voiced Stops |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{b}$ | $\mathbf{d}$ | $\mathbf{j}$ | $\mathbf{g}$ |
| $\mathbf{N}$ | $\mathbf{m}$ | mb | - | - | - |
| $\mathbf{a}$ | $\mathbf{n}$ | - | nd | nj | ng |
| $\mathbf{s}$ | $\mathbf{n}$ | - | - | - | - |
| $\mathbf{a}$ | $\mathbf{y}$ | - | - | - | ng |
| $\mathbf{1}$ |  |  |  |  |  |

## Phonemic Description of Bolano Languange

## a. Vowel

The Bolano language has vocoid data of four similar pairs that doubt its phonemic status. Doubtful pairs consist of $[i-u],[i-e],[u-e]$. The phonemic status setting is done by contrast system in minimal pair (Moleong 2010). These minimal pairs differ only in similar pairs of sounds that are examined for their phonemic status. Thus, it can be concluded that the five vocoids are separate phonemes. The phonemesare /i/, /e/, /a/, /o/, and /u/.

| $[\mathrm{i}]$ | vs | $[\mathrm{u}]$ | nittapi | Dicuci(washed) | nittapu | Didapat <br> (got) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $[\mathrm{e}]$ | vs | $[\mathrm{i}]$ | keue | Biskuit <br> (biscuit) <br> Paku | Kui | Ekor <br> (tail) |
| $[\mathrm{u}]$ | vs | $[\mathrm{e}]$ | paku | (nail) | Pakai <br> (worn) |  |

## b. Consonant

In this study suspicious pairs of contoids are arranged in the following list of contrasts.

## (1) Stop

The nine segments of the Bolano language consist of pairs of voiced segments and with no muted segments except the non-pairing glotal stop [?]. The stop pairs are [p-b], [t-d], [c-j], and $[\mathrm{k}-\mathrm{g}]$. To determine whether the aforementioned nine phonemes are different phonemes, it needs to be proved with a minimum pair or similar pair (Mahsun 2005).

## (a) $[\mathrm{p}]$ vs $[\mathrm{b}]$

$[\mathrm{p}]$ is a silent labial stop. This sound can be positioned at the beginning, middle, and end of the word. The sound phonetically similar to $[\mathrm{p}]$ is $[\mathrm{b}]$, the voiced labial stop. As with [ p$]$, $[\mathrm{b}]$ is present at the beginning, middle, and end of the word. From the data collected obtained the minimum pair as follows. Thus $[\mathrm{p}]$ and $[\mathrm{b}]$ are two different phonemes and will be given conventional symbols of $[\mathrm{p}]$ and $[\mathrm{b}]$.

| $[\mathrm{p}]$ | vs | $[\mathrm{b}]$ | pae | Padi | bae |
| :---: | :---: | :---: | :---: | :---: | :---: | | Rumah |
| :---: |

## (b) $[t]$ vs [d]

$[\mathrm{t}]$ is a silent dental drag, this sound is at the beginning, middle, and end of the word. Sounds that are phonetically similar to [ t ] are [d], a voiced alveolar stop. [d] is also present at the beginning, middle, and end of the word. The following minimum pair is the contrast between $[t]$ with [d]. Thus [t] and [d] are two separate phonemes and are denoted conventionally with [t] and [d].

[t] vs [d] \begin{tabular}{ccccc}

\& tinting \& \begin{tabular}{c}
Ketuke <br>
(knock)

 \& dinding \& 

Dinding <br>
(wall)
\end{tabular} <br>

\& \& tutu \& | Tumbuk |
| :---: |
| (pound) | \& dudu

 

Pupuk <br>
(fertilizer)
\end{tabular}

## (c) $[\mathrm{c}]$ vs $[\mathrm{j}]$

[c] is a silent platal stop. The distribution is limited to the beginning and middle of the word with very low distribution frequency. Sounds that are phonetically similar to [c] are [j], a voiced platal stop. The distribution is the same as [c] that is only present at the beginning, and the middle of the word. Due to the low frequency of [c], the sounds [c] and [j] can not be dichotomized in the minimal pair. However, there are several similar pairs that can prove that the two sound phonemes are two different phonemes. Such as following pairs.

| $[\mathrm{c}]$ | vs | [j] | Cau | Kamu <br> (you) | Jaa | Jala <br> (net) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Cole | Kutang <br> (bra) | Jolo | Kendi <br> (jug) |  |  |

## (d) $[k]$ vs $[g]$

$[\mathrm{k}]$ is a silent velar stop. This sound is at the beginning, middle, and end of the word. The sound phonetically similar to $[\mathrm{k}]$ is $[\mathrm{g}]$, a voiced velar stop. As with $[\mathrm{k}]$, this sound is also present at the beginning, middle and end of the word. $[\mathrm{k}]$ and $[\mathrm{g}]$ contrast in minimal pairs and similar pairs as follows. $[\mathrm{k}]$ and $[g]$ in the minimum pair: Thus $[\mathrm{k}]$ and $[g]$ are two separate phonemes and are denoted conventionally by $[\mathrm{k}]$ and $[\mathrm{g}]$.

$[\mathrm{k}]$ vs $[\mathrm{g}]$ baku | Sagu yang dimasak |
| :---: |
| (cooked sago) |$\quad$ bagu | Puk.ul |
| :---: |
| (punch) |

$[k]$ and $[g]$ in similar pairs:

| $[\mathrm{k}]$ | vs | $[\mathrm{g}]$ | kot | Sembelih <br> (slaughter) | Goti | Pegang <br> (hold) |
| :--- | :--- | :--- | :--- | :---: | :--- | :--- |
|  |  | Kaug | Cukur <br> (Shave) | Gau | Sentuh <br> (touch) |  |

## (e) [?]

[?] is a silent glottic stop, unlike the other drag, this sound has a pair. Specifically, for this glottal stop needs to be further investigate its phonemic status. The distribution of [?] is limited only to the middle and end of the word. In the middle of the word this sound is always flanked by two vocoid, whether it is similar or not and do not form a twin contoid. To apply phonemic status of [?] with a sound somewhat similar to it, the sound is $[\mathrm{k}]$, and $[\mathrm{g}]$. $[\mathrm{k}]$ and [?] contrast in the minimal pair is as follows:

$[\mathrm{k}]$ vs [?] Soko | Ikan beracun |
| :---: |
| (poisonous fish) |$\quad$ So?o | Tali |
| :---: |
| (rope) |
| Bauk | | Dempulperahu |
| :---: |
| (ship's putty) |$\quad$ Bau? | Babi |
| :---: |
| (pig) |

The presence or absence of a [?] Sound in a word also causes a change in the meaning of the example:


Based on the above contrast it can be concluded that [?] is stand-alone and is denoted by [?]. Thus it can be said that the nine Bolano sounds are phonemes.

## (2) Fricative

There are 3 fricative sounds in Bolano language. The sounds are fricative sound. The sounds are $[\mathrm{v}],[\mathrm{s}]$, and $[\mathrm{h}] .[\mathrm{v}]$ is a voiced labial fricative. The distribution is at the beginning of the word, and the middle of the word. In the middle of the word this sound is always flanked by two vocoids. This sound does not form a twin contoid. The determination of phonemic status [v] will be discussed after the [w], a semivocoid that most closely resembling in the distribution. $[\mathrm{s}]$ is a silent alveolar fricative. This sound can stand at the beginning, middle, and end of the word. In the middle of the word it is flanked by two vocoids preceded by nasal [ n ] and can also form twin contoids. [s] does not have a phonetically similar pair. Thus, based on the hypothesis (3) $[\mathrm{s}]$ is an independent phoneme, and is denoted conventionally by $[\mathrm{s}] .[\mathrm{h}]$ is a silent glottal fricative. The distribution is limited to the beginning and middle of the word only. In the middle of the word; it is always flanked by two vocoids, and does not form a twin contoids. As with [s], this sound also does not have a phonetically similar pair. Thus [h] is an independent phonemeand is denoted conventionally by $[\mathrm{h}]$.

## (3) Nasal

There are four nasal sounds found in the language of Bolano. The nasal sounds are $[\mathrm{m}],[\mathrm{n}],[\mathrm{n}]$, $[\mathrm{y}] .[\mathrm{m}]$ is bilabial nasal. The sound is in the beginning, middle, and end of the word. In the middle of the word it can be flanked by two vocoids, followed by sounds [p] and [d] and can form a twin contoid. This sound does not have a phonetically similar pair, thus [ m ] is a selfserving phoneme and is denoted conventionally by $[\mathrm{m}]$. [ n$]$ is the nasal alveolar. This sound can stand at the beginning, middle, and end of the word. In the middle position of the word it is flanked by two vocoids followed by [t] or [d] and can also form a twin contoid. Sounds similar to $[\mathrm{n}]$ are $[\mathrm{n}]$, a nasal platal. The distribution $[\mathrm{n}]$ is limited to the beginning and middle of the word. At the beginning of the word the frequency is very low. In the middle of the word it can be flanked by two vocoids and followed by [j] and may also form twin contoids. [ n ] and [ n ] contrast in minimal pairs and similar pairs are as follows
$[\mathrm{n}]$ and $[\mathrm{n}]$ in a minimum pair:

$[\mathrm{n}]$ $\mathrm{vs} \quad[\mathrm{n}] \quad$ Nawa | Nama orang |
| :---: |
| (name of a |
| person) |$\quad$ nawa $\quad$| Nafas |
| :---: |
| (breath) |

$[\mathrm{n}]$ and $[\mathrm{n}]$ in similar pairs:
[n] vs [n] Monu Meneteskan air kesuatu tempat monu?u Melamar (dripping water to some (propose)

Thus, it can be concluded that these two sounds are separate phonemes and are represented conventionally by $[\mathrm{n}]$ and $[\mathrm{n}]$. $[\mathrm{n}]$ is a velar nasal. This sound is at the beginning, middle, and end of the word. In the middle position of the word it can be flanked by the vocoid, followed by $[\mathrm{k}]$ and $[g]$, and may also form twin contoids. This sound does not have a phonetically similar pair. Thus [ $\mathfrak{y}]$ is a stand-alone phoneme and is denoted conventionally by $[\mathrm{n}]$.

## (4) Liquid

[1] is lateral liquid. This sound is at the beginning, middle, and end of the word. In the middle of the word flanked by two vocoids or forming a twin contoid. Phonetically similar sound to [] is [ r ], aretroflex liquid. This sound can also stand at the beginning, middle, and end of the word. It should be added that $[\mathrm{r}]$ in the beginning and end position of the word is mostly found in the Indonesian word absorption instead of the original Bolano language itself. In the middle position $[r]$ can be flanked by two vocoids and can also form twin contoids. Generally, there are polymorphs. [l] and [r] contrast to the minimumpairs and similar pairs are as follows. Thus, it can be concluded that these two sounds are separate phonemes and are represented conventionally by $[1]$ and $[r]$.
[1] and [ r$]$ in the minimum pair:
[1] vs [r]
Lasi
Cuci
(wash) $\quad$ Rasi
Nama orang
(name of a
person)
$[1]$ and $[r]$ in the similar pairs:

[1] vs [r] Lame? \begin{tabular}{cccc}

Layu \& Rame? \& | Ramai |
| :---: |
| (crowded) |

\end{tabular}

## (5) Semi Vocoid

There are two semivocoids in Bolano namely $[\mathrm{w}]$ and $[\mathrm{y}] .[\mathrm{w}]$ is a labial semivocoid. Distribution is limited to the beginning and middle of the word only. In the middle of the word $[\mathrm{w}]$ is always flanked by two vocoids and the frequency is very low. This sound does not form a twin contoid. Sounds similar to [w] is [v], a labial fricative. From the data collected there are no similar pairs that can prove that they are two separate phonemes. Are $[\mathrm{v}]$ and $[\mathrm{w}]$ complementary distributed? To answer this question will be described in the distribution table 8 below.

Table 8. The Distribution of $[\mathrm{v}]$ and $[\mathrm{w}]$ in Front of a Vocoid

|  | In front of [a] | In front of [u] | In front of [i] | In front of [e] | In front of [o] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [v] | -- | + | -- | -- | -- |
| [w] | + | -- | - | -- | + |

From the table above we can see that $[\mathrm{w}]$ is in front of $[\mathrm{a}]$ and $[\mathrm{o}]$, while $[\mathrm{v}]$ is found only in front of $[\mathrm{u}]$. This fact proves clearly that $[\mathrm{w}]$ and $[\mathrm{v}]$ are complementary, which means that these two sounds are allophones of one phoneme. The phoneme chosen to represent these two sounds is [ w$]$ given that the distribution of $[\mathrm{w}]$ larger than $[\mathrm{v}]$ with its allophones. $[\mathrm{y}]$ is latal semivocoid. This sound is only at the beginning and middle of the word. In the middle position it is always flanked by two vocoids and does not form a twin vocoids. [y] and [w] contrast in similar pairs are as follows: Thus, it can be said that $[y]$ is a phoneme separate from $[\mathrm{w}]$ and is denoted conventionally with [y].

|  |  | Yaku | Saya <br> (I) | vs | Wakut |
| :---: | :---: | :---: | :--- | :---: | :--- | | Angkut |
| :--- |
| (transport) |

## (6) Syllables

A syllable means the wording of a word based on the phoneme structure of the language in question or cutting words based on speech. The types of syllables can be divided into two parts: open syllables and closed syllables. Open syllables are syllables ending in vowels whereas closed syllables are syllables ending in consonants. In deciphering a word into syllables there are certain patterns that can be followed. The Bolanosyllable consists of at least one vowel and a maximum of two vowels and three consonants. In addition, there are also syllables consisting of one vowel, and one consonant. The syllable is composed as $(\mathrm{C}-\mathrm{V})$ and (V-C).

## CONCLUSION

In conclusion, this study managed to describe the Bolano language phoneme system. Based on the Bolano language phoneme system, this study obtained phonetic data, indicating the sound of language sounds that amounted to 25 it consists of 5 vocoids and 20 konloids. In Bolano language there is a word consisting of a vocoid series, like the word ue which means rattan and he which means this. Historically such a vocoid series is seen as a sincope, such as the removal of the controtic sound in the middle of a word. From the discussion of the distribution of controversies and pairs of contrasts of dubious doubts can be inferred that the 20 Bolano-language cones, 19 segments of phonemes and sat segments are allophones. The allophone is [v] whereas the 19 phonemes are $[\mathrm{p}],[\mathrm{b}],[\mathrm{t}],[\mathrm{d}],[\mathrm{c}],[\mathrm{j}],[\mathrm{k}],[\mathrm{g}],[?],[\mathrm{s}],[\mathrm{h}],[\mathrm{m}],[\mathrm{n}],[\mathrm{n}],[\mathrm{r}],[\mathrm{l}],[\mathrm{r}],[\mathrm{w}]$, and $[\mathrm{y}]$

## REFERENCES

Clark, J. and Yallop, C. 2012. Fonetik Dalam Fonologi Bahasa Indonesia, Tinjauan Deskriptif Sistem Bunyi Bahasa Indonesia. Jakarta: PT Bumi Aksara
Mahsun, M.S. 2005. Metode penelitian: Tahapan Strategi, Metode dan Tekniknya. Jakarta: PT Grasindo Persada.
Moleong, L.J. 2010. Metodologi Penelitian Kualitatif. Bandung : PT Remaja Rosdakarya
Muslich, M. 2012. Fonologi Bahasa Indonesia, Tinjauan Deskriptif Sistem Bunyi Babasa Indonesia. Jakarta: PT Bumi Aksara.
Pateda, M. 2011. Linguistike Sebuah Pengantar. Bandung: Angkasa Bandung.
Verhaar, J.W.M. 1989. Pengantar Linguistik.Yogyakarta: Gajah Mada University Press.

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