



Gorontalo and Arabic Morphology: A Contrastive Analysis to Ease Language Learning and Translation

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Abstract. As a foreign language, Arabic has an interesting morphological system to study when compared to Gorontalo language. Even though Gorontalo is only a regional language, the influence of Arabic is significant. This can be seen in the large amount of Arabic vocabularies that has been absorbed into the Gorontalo language. Arabic has become the first foreign language to become a mandatory subject taught in Islamic education institutions, also the culture of the Gorontalo people is very attached to Islam and Arabic, so that the Koran has been translated into Gorontalo language. Arabic morphology has a system of derivational affixations and inflectional affixations. This research is a descriptive qualitative research through contrastive analysis, which aims to describe morphological phenomena between two languages (Gorontalo and Arabic) and compare them to facilitate language teaching and translation practice. This affixation gives rise to prefixes, infixes, suffixes and confixes. This affixation process will have an impact on word formation and the diversity of meanings. The affixation process in the Gorontalo language also has affixation, derivation, reduplication and compounding. The Gorontalo language affixes a total of 113 affixes which include 73 prefixes, 16 suffixes, 16 confixes and 8 infixes. Meanwhile, Arabic is known as al-ziyadah which consists of 10 abbreviated letters — divided into several types: the first is prefix (Antecedents), Suffix (suffix), Confix(double), infix (Padding).

Keywords: Gorontalo-Arabic Morphology, Contrastive Analysis, Foreign Language Learning, Translation

1 Introduction

All languages in this world have characteristics that make them different from other languages. Arabic as an international language is used by more than 200 million people in the world[1]. In Indonesia, Arabic is the second foreign language taught in educational institutions after English. Even in educational institutions that are characterized by Islam, such as madrasas, Islamic boarding schools and *ma'had*, Arabic is the first foreign language that must be taught to students[2]. Thus, it can be said that Arabic has quite a large influence, not only on hundreds of millions of Arab Muslims,

but also on anyone who has an interest in building relations with the Arab world in particular and the Muslim world in general.

Gorontalo language is one of the regional languages in Indonesia used by the Gorontalo tribe. The Gorontalo language is spread across the North Sulawesi peninsula, especially in the Gorontalo Province area, Tomini Bay, as part of the North Sulawesi and Central Sulawesi Provinces. This language is used by 1,000,000 speakers[3]. This language is an endangered language[4], so special attention is needed to preserve it[5], by regenerating its speakers so that they continue to use this language in everyday life[6], and society should continue to produce research results and written works that with the theme of the Gorontalo language.

These two languages should be able to be contrasted because of its elements of positive transfer which can be seen from the similarities aspect of the system. Language transfer occurs when there are similarities in the structure of phonology, morphology, syntax and lexicon between the first language and the second language[7], making it easier for language learners to understand and produce sentences in the second language. Besides that, language aims to form behavior that can be learned by bringing students into the atmosphere of the language being studied[8]. One of the most interesting linguistic sub-discipline studies is contrastive analysis of the morphology of two languages. This study more specifically analyzes word forms, changes in form and meaning that arise as a result of these changes[9].

Much research has been carried out on contrastive analysis of language morphology. To further clarify the similarities and differences with previous research, researchers have identified three studies that are similar to this research. That is: 1) *Affixes (a study of the morphology of the Gorontalo language)*[10]. This research concludes that the affixation process in the Gorontalo language places more emphasis on aspects of time and past and future tenses. 2) *Morphological Process of Nouns in English and Gorontalo (Contrastive analysis study)*[11]. This research attempts to compare English with Gorontalo language on nouns. To analyze the data the author uses the theoretical framework of Lado and Whitman in classifying the morphological processes of nouns. The results of this research show that the morphological processes of nouns in English in English and Gorontalo have similarities, namely the presence of affixation, reduplication and compounding.

Recent research discusses *Inflectional Affixes and derivations in the Gorontalo language*[12]. This research is not intended to compare the two languages, but is more focused on efforts to describe the forms of affixes and derivational affixes in the Gorontalo language. Inflections and derivational affixes in the Gorontalo language are found in affixes *Prefixes, infixes, suffixes and confixes*, with the characteristic that the affix embedded in the base word must change the meaning and class of the word (derivation), it must also maintain the meaning and class of the word according to the base word (inflection).

The urgency of this research is to compare the morphological systems between the two languages in order to see similarities, differences and synchronous changes in morphology and their impact on changes in meaning. The results of this research will show how the morphological phenomena of Gorontalo and Arabic include inflectional and derivational affixation systems as well as the similarities and differences in mor-

phological processes between Gorontalo and Arabic through contrastive analysis so as to facilitate foreign language learning and translation practice.

2 Methods

The type of research is library research with a descriptive approach, namely describing morphological phenomena between two languages (Gorontalo and Arabic) and comparing them to facilitate language teaching and translation practice. This research involves analyzing the similarities and differences between first language (B1) and second language (B2) systems sourced from library documents, in the form of books, dictionaries, articles. The primary sources for this research are (1) Gorontalo Language Morphology Book, (2) Gorontalo Language Morphology and Syntax Book, (3) Gorontalo Language Dictionary, (4) Sharf-Tashrif/Arabic Morphology Book. Secondary sources are published research results in the form of scientific articles, papers and proceeding manuscripts.

The research instrument is the research team itself. And other supporting instruments in the form of laptops, books, dictionaries and articles. For note-taking activities, the supporting instruments are notebooks and ballpoint pens for recording research results.

3 Results and Discussion

The morphology of Gorontalo language has similarities and differences with language morphology in general, the process of word formation in general. The word formation process in the Gorontalo language consists of four types, namely 1) Inflectional Affixation, 2) Reduplication and 4) Compounding. Apart from the four processes above, the Gorontaslo language also has a morphophonemic system and a word classification system.

3.1 Affixation in Gorontalo Language

Gorontalo language itself only has four types of affixations, namely: Prefixes, affixes that are placed in front of the base word, Infixes, namely affixes that are placed in the base word, Confixes, which is combined affixes that are located at the beginning and end of the base word, and Suffixes, affixes that are placed at the end of the basic word, the forms of affixes in the Gorontalo language themselves only indicate the future and past tense, except that the current tense is not found in the affix, but by the bound morpheme *He* or *hi* that precedes the verb in the morpheme phrase. This is what differentiates Gorontalo language from Arabic.

Example of tenses in the future:

1. *Waatia motuluhe to 'utoonu?*

Meaning: "Where will I sleep?"

2. *Taatoonu taa motibalataa teeto?*

Meaning: "Who will lie there?"

3. *Tumuota ode huali tio*

Meaning: Will go into his room

In the Gorontalo language, every prefix has an initial consonant/m/ like *mo-*, *mopo-*, *moti-*, *moti-*, and Infix *-um-*, everything points to the past tense. The division of affixes in the Gorontalo language is divided into four, namely:

Prefix. The Gorontalo language has many prefixes, both prefixes that stand alone as bound morphemes and combined morphemes consisting of two or more syllables. According to research results, the number of Gorontalo language prefixes is approximately 73 prefixes:

0-, *mo-*, *me-*, *po-*, *lo-*, *hi-*, *he-*, *ma-*, *mamo-*, *mapo-*, *malo-*, *rnaqo poqo*, *loqo*, *u-*, *popo-*, *lopo-*, *topo-*, *malo-*, *meqi-*, *peqi-*, *leqi-*, *tapa-*, *moti-*, *loti-*, *mohi-*, *pohi-*, *loqi-*, *poti-*, *ngopo-*, *yilo-*, *yile-*, *mongo-*, *tonggo-*, *hemo-*, *helo-*, *hipo-*, *mayile-*, *mopoqo*, *yilopo-*, *yilopoqo-*, *hemohi-*, *mopohu-*, *lopohu-*, *yiloqo-*, *piloqo-*, *peqipo-*, *leqipo-*, *motolo-*; *potolo-*, *lotolo-*, *mehemo-*, *meqipo-*, *rneqipoqo-*, *leqipoqo-*, *meqipohi-*, *topolo-*, *hemotolo-*, *hipotolo-*, *heloropo-*, *rneqitolo-*, *tilonggo-*, *mo4 tonggo-*, *po:onggo-*, *lotonggo-*, *hemeqimolo-*, *heleqitolo-*, *motohu-*, *potohu-*, *yitotohu-*, *mohinggo-*, *pohinggo-*, *dan lohinggo-*. For instance:

Table 1. Word Formation with prefix *po-*, *po-*, in Gorontalo Language

Word origin	Prefix	Information	Meaning
Patu (hot/warm)	<i>Po-</i>	<i>Pomatuqu</i>	Warm
Hama (Take)	<i>Po-</i>	<i>Pohama</i>	Get it
Hehu (seize)	<i>Po-</i>	<i>Pohehua</i>	Fighting over
<i>Talua</i> (direction)	<i>Popo-</i>	<i>Popotalua</i>	Directed
<i>Hutu</i> (make)	<i>Popo-</i>	<i>Popotihutu</i>	Make
Sabari (be patient)	<i>Popo-</i>	<i>Poposabari</i>	Be patient

Infix. In the Gorontalo language infix, there are 8 infixes (insertions), namely: *il-*, *ul-*, *um-*, *im-*, *ilim-*, *ilum*, *ol-*, *ilol-*. For instance:

Table 2. Word Formation with Infixes *il-*, *um-*, *im-*, *ilum-*, in Gorontalo Language

Word Origin	Infikx	Word formation	Meaning
Patu (hot/warm)	<i>Il-</i>	<i>Pomatuqu</i>	Warm
Hama (take)	<i>Um-</i>	<i>Pohama</i>	Get it
Hehu (seize)	<i>Im-</i>	<i>Pohehua</i>	Fighting over
<i>Talua</i> (direction)	<i>Illum-</i>	<i>Popotalua</i>	Directed

Confix. In contrast to Infixes, there are 16 Gorontalo Language Confixes including confixes *of-*. *...when*, *of-*. *...ya*, *o-* . . . *-on-*. For instance:

Table 3. Word Formation with Konfiks *il-, um-, im-, ilum-*, in Gorontalo Language

Word Origin	Confikx	Word formation	Meaning
<i>Hama</i> (take)	<i>o-...wa-</i>	<i>ohamawa</i>	Can be taken
<i>Tali</i> (buy)	<i>o-...ya-</i>	<i>Otaliya</i>	Can be Purchased

Suffix. There are the same number of suffixes in Gorontalo as confixes, namely 16 suffixes. In the table below is an example of the suffix *i-* which is combined with a basic morpheme consisting of three syllables. For instance:

Table 4. Word Formation with Sufiks *i-* in Gorontalo Language

Word Origin	Sufiks	Word formation	Meaning
<i>He'uto</i> (close)	<i>i-</i>	<i>Hequti</i>	Close it
<i>Huloqo</i> (Sitting)	<i>i-</i>	<i>Huloqi</i>	Sit Down

3.2 Affixation (الزيادة حرف) in Arabic

In contrast to the Gorontalo language, Arabic has the term **الزيادة حرف** or additional letters which do not include *isim* and *fi'il* which are included in an Arabic word, thus creating a new meaning after this process. **الزيادة حرف** in Arabic has 10 letters, namely: **س - أ - ل - ت - م - و - ن - ي - ه - ع**

Affixation in Arabic is also known as *Tasrif* (التصريف) which means changing a word into a different word according to the intended meaning. Arabic has a different pattern of change from Gorontalo language. Because Arabic cannot be read without the help of vowels (الحركات). For example / a-a-a/ or a-i-u or in the word *nasara/ صَنَ نَ*. The basic principles of verb formation in Arabic are that the first is to have a root word and a pattern.

الزيادة حرف in Arabic is divided into several types: the first is prefix (السوابق), suffix (الواحق), confix (المزدوجة), infix (الحشو).

Prefixes (السوابق). The following changes words in Arabic if **السوابق** is entered, For instance:

Table 5. Word Formation with Antecedents in Arabic Language

Word origin	Antecedents	Word formation	Meaning
<i>نَصَرَ</i> (help)	<i>ي</i>	<i>يُنَصِّرُ</i>	He's a he is helping
<i>نَصَرَ</i> (help)	<i>ت</i>	<i>تُنَصِّرُ</i>	She is helping

3.1.1 Suffixes (الواحق)

Word changes in Arabic if the letters **الواحق** are entered, For instance:

Table 6. Word Formation with The suffix in Arabic Language

Word origin	الواحق	Word formation	Meaning
نَصَرَ (Tolong)	ا	نَصَرَا	Dia (Lk 2 orang) sudah menolong
نَصَرَ (Tolong)	وا	نَصَرُوا	mereka (Lk) Sudah menolong
نَصَرَ (Tolong)	ت	نَصَرْتِ	Dia (Pr) Sudah Menolong
نَصَرَ (Tolong)	تا	نَصَرْتَا	Mereka (PR 2 org) Sudah Menolong
نَصَرَ (Tolong)	ن	نَصَرْنَ	Mereka (Pr) Sudah Menolong
نَصَرَ (Tolong)	ت	نَصَرْتِ	Kamu(Lk) Sudah Menolong
نَصَرَ (Tolong)	تُما	نَصَرْتُمَا	Kamu 2 orang(Lk) Sudah Menolong
نَصَرَ (Tolong)	تُهم	نَصَرْتُهُم	Kalian (Lk) Sudah Menolong
نَصَرَ (Tolong)	ت	نَصَرْتِ	Kamu (Pr) Sudah Menolong
نَصَرَ (Tolong)	تُنا	نَصَرْتُنَا	Kita Sudah Menolong

Confixes (المزدوجة). Confix is a form of a continous verbs, among confixes ya, alif and nun, ta, alif and nun, Some examples of المزدوجة in the following table. For instance:

Table 7. Word Formation with the المزدوجة in Arabic Language

Word origin	المزدوجة	formation	Meaning
نَصَرَ (Help)	يـ / ان	يُنَصِّرَان	They (two man) is doing the act of helping
نَصَرَ (Help)	يـ / ون	يُنَصِّرُونَ	They are helping
نَصَرَ (Help)	تـ / ان	تُنَصِّرَان	They (plural) are helping
نَصَرَ (Help)	تـ / ن	تُنَصِّرْنَ	They are (two woman) are Helping
نَصَرَ (Help)	تـ / ون	تُنَصِّرُون	They (more than two woman) are helpi
نَصَرَ (Help)	تـ / ئين	تُنَصِّرِيْن	You (man) are helping
نَصَرَ (Help)	تـ / ن	تُنَصِّرِيْن	You (woman) are helping

Infixes (الحشو). Infixes in verbs for example if the affix *alif* is put in *isim fail* from three letter verb (*tsulasi mujarrood*). The insertion of infixes is located between the first and the second letter, and the letter before the end with *kasrah*, then *فعل* (*fa'ala*) becomes *فاعل* (*fa'ilun*), for example :

Table 8. Word Formation with Padding in Arabic Language

Word origin	الحشو	Word formation	Meaning
ضَرَبَ (hit)	/	ضَارِبٌ	A man that hit
نَجَحَ (success)	/	نَاجِحٌ	A successful man

3.3 Contrastive Analysis

Through contrastive analysis, it can be concluded that the similarities between the two languages are:

1. In the Gorontalo language and Arabic, every change due to the presence of *ziyah* letters (Affixes) in a sentence greatly influences the change in meaning.
2. Gorontalo language and Arabic both have affixes which include prefixes, suffixes, confixes and infixes.

The differences are:

1. Verbs in Arabic only have confixes, as in the example *fi'il madhi* is connected to *dhomir*. This is different from Indonesian which has prefixes, suffixes and confixes
2. In Arabic, the purpose of adding affixes (الألف – الواو – التاء) is to indicate the stored subject (مستطر ضمير) in *Fiil madhi* sentences. So that in terms of meaning the subject and predicate have been formed in one word. Meanwhile, in the Gorontalo language the affix which is added in order to form a transitive and intransitive verbs and adjectives. From which, the past verbs still need subject.
3. Affixes in the Gorontalo language only indicate future and past time while ongoing time is not included in the Gorontalo language affixes, in contrast to Arabic which includes everything including ongoing time.
4. Arabic verbs are always based on tense, number and gender. Meanwhile, Gorontalo language is only based on time.
5. Verbs in Arabic include gender which is divided into male (*mudzakkar*) and female (*muannats*). Meanwhile, the Gorontalo language is separate.
6. Verbs in Arabic also include numbers which are divided into one (*mufrad*), two (*mutswana*) and plural.

4 Conclusion

Based on the research results, several things related to the research that have been studied have been concluded, namely:

1. The Gorontalo language itself has four types of affixations, namely: Prefixes, affixes that are placed in front of the base word, Infixes, namely affixes that are placed in the base word, Confixes, namely combined affixes that are located at the beginning and end of the base word, and Suffixes, namely affixes that are placed at the base word. At the end of the basic word, in contrast to the Gorontalo language, Arabic has the term *الزيادة حرف* or additional letters which do not include isim and fi'il which are included in an Arabic word, thus creating a new meaning after this process.
2. In Arabic, affixation is known as *Tasrif* (التصريف) which means changing a word into a different word according to the intended meaning. Arabic has a different pattern of change from Gorontalo language. Because Arabic cannot be read without the help of vowels (الحركات).
3. Affixations in the Gorontalo language which include prefixes, suffixes, infixes and confixes total approximately 113 affixes
4. Arabic derivation is divided into 44 classes and 980 forms.

The problem or mistake that students often make in studying morphology in Arabic is translating Arabic sentences into Gorontalo or Indonesian or from Gorontalo into Arabic, especially if a sentence contains letters. *excess* which serves to change the meaning. Apart from that, in identifying sentences in Arabic, especially in affixation or *tasrif*. From the existing problems, an alternative that is considered good for optimizing understanding of *tasrif* material in learning Arabic is the preparation of teaching materials in the form of supporting books or dictionaries that discuss in detail the *ziyadah* function and grammatical meaning due to the presence of *ziyadah* letters which of course is also supported by the use of many examples. So, it is hoped that this research will provide benefits and reduce errors in translation.

References

1. I. Zeroual, D. Goldhahn, T. Eckart, and A. Lakhouaja, "OSIAN Open Source International Arabic News Corpus -," pp. 175–182, 2019.
2. W. Abd Elwahab, "The Effect of Local Arabic Dialects on Learning English Language Pronunciation," *Arab World English J.*, vol. 11, no. 1, pp. 489–499, 2020, doi: 10.24093/awej/vol11no1.33.
3. K. Anderbeck, "Portraits of language vitality in the languages of Indonesia," *Lang. Doc. Cult. Pract. Austronesian world Pap. from 12-ICAL*, vol. Volume 4, no. April, pp. 19–57, 2015, [Online]. Available: https://openresearch-repository.anu.edu.au/bitstream/1885/13514/1/Papers_ICAL_Volume_4.pdf#page=23
4. U. Zakaria, N. Lustyantje, and E. Emzir, "The Maintenance of Gorontalo Language on Teenager Group: An ethnography at Gorontalo City," vol. 254, no. Conaplin 2018, pp. 83–87, 2019, doi: 10.2991/conaplin-18.2019.231.
5. Z. Soga, "Kosa Kata Serapan Bahasa dan Sastra Arab," *'A Jamiy J. Bhs. dan Sastra Arab*, vol. 10, no. 1, pp. 216–229, 2021, [Online]. Available: <http://dx.doi.org/10.31314/ajamiy.10.1.216-229.2021>
6. M. Rahman and S. H. Norfahmi, "Outcome Based Education in Nonformal Education 5 .

- 0 Society Era A MODEL FOR BAHASA GORONTALO PRESERVATION TO Novateur Publication , India,” pp. 62–66, 2013.
7. S. Gani and B. Arsyad, “KAJIAN TEORITIS STRUKTUR INTERNAL BAHASA (Fonologi, Morfologi, Sintaksis, dan Semantik),” *A Jamiy J. Bhs. dan Sastra Arab*, vol. 7, no. 1, p. 1, 2019, doi: 10.31314/ajamiy.7.1.1-20.2018.
 8. Andrew D. Cohen, *Strategies in learning and using a second language*. 2014.
 9. H. Kim, S. Choi, and S. O. Kweon, “Effects of announcing a vocabulary test before reading a glossed text on reading behaviors and vocabulary acquisition: An eye-tracking study,” *PLoS One*, vol. 18, no. 1 January, pp. 1–18, 2023, doi: 10.1371/journal.pone.0280552.
 10. O.: Sri and R. Luwiti, “AFIKS (Suatu Kajian Morfologi Bahasa Gorontalo),” *JURNALPELANGIHMU VOLrÆE*, vol. 2, no. 5, pp. 1–12, 2009, [Online]. Available: <https://ejournal.ung.ac.id/index.php/JPI/article/view/596/547>
 11. B. Gorontalo and S. Dama, “Oleh :,” 2015.
 12. A. Abdullah, D. N. Djou, and S. R. Masie, “Afiks Infleksi dan Derivasi dalam Bahasa Gorontalo,” *Ideas J. Pendidikan, Sos. dan Budaya*, vol. 6, no. 4, p. 397, 2020, doi: 10.32884/ideas.v6i4.305.

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