
Language Kinship of English, German, and Dutch: A Comparative Historical Linguistic Study

Nisa Anggraini Batubara¹⁾, Dwi Widayati²⁾
^{1,2)} Universitas Sumatera Utara

Corresponding Author
Email : nisaanggraini.batubara@gmail.com

Abstract

English, German, and Dutch belong to the Indo-European language family and the Germanic language subgroup. So there is an assumption regarding the existence of kinship of these three languages, which also could be seen in the fact that there are some similarities in the form and meaning. This makes the researchers analyze how the relationship between English, German, and Dutch is and how far the level of kinship of the three languages is. This research is a quantitative research using qualitative descriptive method and lexicostatistical technique. Lexicostatistics is a technique in grouping languages that tends to prioritize statistical observation of words (lexicon), and then tries to determine the grouping based on the percentage of similarities and differences between one language and another. By using 200 Swadesh's basic vocabulary as an analytical material, 4 identical data and 102 similar data were found. The results of lexicostatistical calculations showed that the percentage of kinship of English (BI), German (BJ), and Dutch (BB) is 53%. From this calculation, it is determined that the linguistic status of these three languages is classified as languages of the family.

Keywords: Kinship, Lexicostatistic, English, German, Dutch

INTRODUCTION

Language changes and develops over time. Keraf (1991:34) states that language changes and developments are directly proportional to the speakers and are influenced by the migration movement of the spread of the parent languages. Languages that come from a single parent origin (cognate) have kinship relationships in the past. This is indicated by the similarities in form and meaning which are a reflection of the history of the same heritage.

English, German, and Dutch belong to the Indo-European language family and the Germanic language subgroup. So there is an assumption regarding the existence of kinship of these three languages, which can also be seen in the fact that there are some similarities and similarities in form and meaning.

This then attracted the attention of researchers to examine how far the kinship between English, German, and Dutch will be explained through lexicostatistical comparison techniques. Theoretically, related languages have the characteristics of the same form and meaning in the form of a cognate set of words. The kin word sets are hypothesized to originate from the same protolanguage and are also hypothesized to be the forerunners of these languages. The similarity and resemblance of form and meaning is not due to borrowing and not due to chance, but because of the continuation of the same original characteristics (protolanguage). In addition, the word kin is also stored in the regular sound equivalence at each position. This order by neogrammarians is called the law of sound. The well-known laws of sound are Grimm's law and Verner's law. Grimm's law is the law of sound equivalence of Indo-European languages, while Verner's law is the law of sound equivalence of Indo-German languages (Bynon, 1979; Jeffers and Lehist, 1979; Hock, 1988). The relationship of related languages in comparative studies, in principle, can be proven based on the inherited elements of the parent language or proto-language (Widayati, 2018).

Keraf (1991: 22) says that historical comparative linguistics (comparative historical linguistics) is a branch of linguistics that questions language in the field of time and the changes in language elements that occur in that time field. One of the goals and interests of comparative historical linguistics is to sub-group languages in a language family. Languages in the same family are not necessarily the same level of kinship or the same level of similarity to each other.

Widayati (2014: 9) says that every language in the world has certain universal characteristics which include:

1. Each language has certain forms that are associated with its meaning/similarity in form and meaning.
2. Each language has the smallest set of functional units, namely phonemes and morphemes.
3. Each language has certain classes, namely nouns, verbs, adjectives, personal pronouns and numerals.

Comparative historical linguistics only uses the similarity of form and meaning as a reflection of the history of the same heritage. The related languages show the following similarities:

- 1) similarity of sound system (phonetics) and sound arrangement (phonological);
- 2) morphological similarities, namely similarities in the form of words and similarities in grammatical forms;
- 3) syntactic similarity, namely the similarity of the relationship between words in a sentence.

In comparing two or more languages, lexicostatistics can be used. Lexicostatistics is a technique to determine the level of relationship between two languages by using a simple method, namely comparing the vocabulary contained in the language being compared and then seeing and determining the level of similarity of the vocabulary of the two languages (Crowly & Bower, 2010). Meanwhile, Keraf (1991:121, 128) states that lexicostatistics is a technique in language grouping that tends to prioritize statistical observation of words (lexicon), and then tries to determine the grouping based on the percentage of similarities and differences between a language and another language. A word pair will be declared a relative if it fulfills one of the conditions (a) the pair is identical, (b) the pair has a phonemic correspondence, (c) is phonetically similar, or (d) one phoneme is different.

RESEARCH METHODS

This research is a quantitative research with a qualitative descriptive method. In this study, the researchers used 200 Swadesh vocabularies. Then the technique used in analyzing the data is the lexicostatistical technique.

Lexicostatistics is a technique in grouping languages which tends to prioritize statistical observation of words (lexicon), and then tries to determine the grouping based on the percentage of similarities and differences between one language and another (Keraf, 1991).

Lexicostatistical Techniques:

1. Collecting the basic vocabulary of the language of the relatives being studied. This step is the earliest step in comparing the language of relatives. The vocabulary list used in this study consisted of 200 Swadesh vocabularies.
2. Determine the word relatives.
3. Calculating the percentage of kinship by determining and counting pairs of words that are similar and similar to the formula as follows:
4.
$$\frac{\text{number of identical words} + \text{number of similar words}}{\text{Swadesh}} \times 100\%$$

Furthermore, the status of kinship relations between these languages can be determined in the following ranges:

Classification of kinship percentage

Dialect of language	81-100%
Language of family	36-81%
Families of stock	12-36%
Stock of microphilum	04-12%
Microphyla of esophylum	01-4%
Mesophyll of acrophylum	00-1%

(Crowley, 1987)

RESULTS AND DISCUSSION

The kinship of English (BI), German (BJ), and Dutch (BB) was analyzed based on the identification of the three languages using Swadesh's basic vocabulary, which is 200 basic vocabularies. The Swadesh list is considered good in this study because it consists of non-cultural words. In addition, root word retention has been tested in languages with written scripts.

Data from 200 basic Swadesh vocabularies, identified relative word pairs which were compared through identical pairs and similar pairs. The comparison results are presented in the following table:

Table 1. Identical pairs

No.	Glos	BI	BJ	BB
1.	angin	wind	wind	wind
2.	dalam	in	in	in
3.	hangat	warm	warm	warm
4.	tangan	hand	hand	hand

From the list above, 4 identical pairs were found in BI, BJ and BB.

Table 2. Similar pairs

No.	Glos	BI	BJ	BB
1.	abu	ash	asche	as
2.	air	water	wasser	water
3.	apa	what	was	wat
4.	api	fire	feuer	vuur

5.	ayah	father	vater	vader
6.	baik	good	gut	goed
7.	bakar	burn	brennen	branden
8.	baring	lie	liegen	liggen
9.	baru	new	neu	nieuw
10.	batu	stone	stein	steen
11.	beku	freeze	frieren	vriezen
12.	belah	split	spalten	splijten
13.	bengkak	swell	schwellen	zwellen
14.	beri	give	geben	geven
15.	bintang	star	stern	ster
16.	buah	fruit	frucht	fruit
17.	bukan	not	nicht	niet
18.	bulan	moon	mond	maan
19.	bulat	round	rund	rond
20.	bulu	feather	feder	veer
21.	bumi	earth	erde	aarde
22.	busuk	rotten	verrottet	rot
23.	cacing	worm	wurm	worm
24.	coret	scratch	kratzen	krabben
25.	cuci	wash	waschen	wassen
26.	dan	and	und	en
27.	darah	blood	blut	bloed
28.	datang	come	kommen	komen
29.	dengar	hear	hören	horen
30.	dingin	cold	kalt	koud
31.	diri	stand	stehen	staan

	(berdiri)			
32.	dua	two	zwei	tweet
33.	duduk	sit	sitzen	zitten
34.	empat	four	vier	vier
35.	es	ice	eis	ijs
36.	garam	salt	salz	zout
37.	gigit	bite	beißen	bijten
38.	hari	day	tag	dag
39.	hati	liver	leber	lever
40.	hidung	nose	nase	neus
41.	hidup	live	leben	leven
42.	hijau	green	grün	groen
43.	hujan	rain	Regen	regen
44.	ibu	mother	Mutter	moeder
43.	ikan	fish	Fisch	vis
44.	ini	this	dieses	deze, dit
45.	isap	suck	saugen	zuigen
46.	jantung	heart	Herz	hart
47.	jatuh	fall	fallen	vallen
48.	jauh	far	fern	ver
49.	kaki	foot	Fuß	voet
50.	kanan	right	rechts	rechts
51.	kapan	when	wann	wanneer
52.	kata	say	sagen	zeggen
53.	kepala	head	Haupt	hoofd
54.	kuku	fingernail	Fingernagel	vingernagel
55.	kutu	louse	Laus	luis

56.	laki-laki	man	Mann	man
57.	lama/tua	old	alt	oud
58.	laut	sea	See	zee
59.	lebar	wide	weit	wijd
60.	lemak	fat	Fett	vet
61.	lidah	tongue	Zunge	tong
62.	lihat	see	sehen	zien
63.	lima	five	fünf	vijf
64.	ludah	spit	spucken	spuwen
65.	lutut	knee	Knie	knie
66.	makan	eat	essen	eten
67.	malam	night	Nacht	nacht
68.	manusia	man	Mensch	mens
69.	mata	eye	Auge	oog
70.	merah	red	rot	rood
71.	minum	drink	trinken	drinken
72.	mulut	mouth	Mund	mond
73.	nama	name	Name	naam
74.	nyanyi	sing	singen	zingen
75.	panjang	long	lang	lang
76.	pasir	sand	Sand	zand
77.	payudara	breast	Brust	borst
78.	pegang	hold	halten	houden
79.	penuh	full	voll	vol
80.	pikir	think	denken	denken
81.	putih	white	weiß	wit
82.	rambut	hair	Haar	haar

83.	ranting	stick	Stock	stok
84.	renang	swim	schwimmen	zwemmen
85.	rumput	grass	Gras	gras
86.	salju	snow	Schnee	sneeuw
87.	satu	one	eins	een
88.	saya	I	ich	ik
89.	semua	all	alle	al,alle
90.	sini	here	hier	hier
91.	situ/sana	there	dort	daar
92.	tahun	year	Jahr	jaar
93.	tajam	sharp	scharf	scherp
94.	takut	fear	fürchten	vrezén
95.	tanduk	horn	Horn	hoorn
96.	tawa	laugh	lachen	lachen
97.	tebal	thick	dick	dik
98.	telinga	ear	Ohr	oor
99.	telur	egg	Ei	ei
100.	terbang	fly	fliegen	vliegen
101.	tidur	sleep	schlafen	slapen
102.	tiga	three	drei	drie

From the list above, 102 identical pairs were obtained between BI, BJ and BB.

Then the kinship relationship of the three languages can be calculated using the kinship percentage formula:

$$\frac{\text{number of identical words} + \text{number of similar words}}{\text{Swadesh}} \times 100\%$$

$$= \frac{4+102}{200} \times 100\% = 53\%$$

This percentage shows that BI, BJ and BB are *languages of family*.

CONCLUSION

Using 200 basic Swadesh vocabularies as an analysis material, it was found that the lexicon similarity between the two was about 53% through the comparison of identical pairs and similar pairs. From the percentage of kinship, it is grouped that English, German and Dutch are the *languages of the family*.

REFERENCES

- Afria, R., et al. (2020). *Relasi Bahasa Melayu Riau, Bugis, dan Banjar: Kajian Linguistik Historis Komparatif*. Medan Makna: Jurnal Ilmu Kebahasaan dan Kesastraan, 94-106.
- Afria, R., Sanjaya, D., & Tiara, M. (2020). *Leksikostatistik dan Grotokronologi Bahasa Melayu Palembang, Basemah Lahat, Basemah Pagaram, dan Kayu Agung: Kajian Linguistik Historis Komparatif*. Madah: Jurnal Bahasa Dan Sastra, 11(1), 27-42.
- Ahmadi, Y. (2017). *Hubungan Kekerabatan Bahasa Minang dan Bahasa Sunda: Kajian Linguistik Bandingan Historis*. Jurnal Semantik, 4(1), 71-88.
- Crowley, T. (1997). *An Introduction to Historical Linguistics*. Oxford: Oxford University Press.
- Dalimunthe, S. (2018). *Hubungan Kekerabatan Bahasa Batak Mandailing dan Bahasa Tanah Ulu (Suatu Kajian Linguistik Historis Komparatif)*. Medan Makna: Jurnal Ilmu Kebahasaan Dan Kesastraan, 16(1).
- Dardanela, et al. (2015). *Cognates among the Karo, Alas and Gayo Languages*. International Journal of Humanities and Social Science, 5(12), 55-58.
- Fitrah, Y., & Afria, R. (2017). *Kekerabatan Bahasa-Bahasa Etnis Melayu, Batak, Sunda, Bugis, dan Jawa Di Provinsi Jambi: Sebuah Kajian Linguistik Historis Komparatif*. Jurnal Titian, 1(2).
- Jahdiah, J. (2018). *Genetic Relationship of Banjar and Bali Language: Comparative Historical Linguistic Review*. Gramatika: Jurnal Ilmiah Kebahasaan Dan Kesastraan.
- Keraf, G. (1991). *Linguistik Bandingan Historis*. Jakarta: Gramedia.
- Mahsun. (2017). *Metode Penelitian Bahasa, Tahapan, Strategi, Metode dan Tekniknya*. Depok: Rajagrafindo Persada.
- Mualita, G. (2015). *Kekerabatan Bahasa Batak Toba dan Bahasa Batak Angkola Suatu Kajian Linguistik Historis Komparatif*. Arkhais-Jurnal Ilmu Bahasa dan Sastra Indonesia, 6(1), 46-52.
- Ritonga, S. R. L., Dardanila, D., & Gustianingsih, G. (2020). *Kekerabatan Bahasa Angkola, Bahasa Simalungun dan Bahasa Toba*. Kode: Jurnal Bahasa, 9(3).

- Setiawan, L. G. I. P. S. (2020). *Hubungan Kekerabatan Bahasa Bali dan Sasak dalam Ekoleksikon Kenyuran: Analisis Linguistik Historis Komparatif*. Jurnal Inovasi Penelitian, 1(1), 27-30.
- Surbakti, E. B. (2016). *Kekerabatan Bahasa Karo, Minang, dan Melayu: Kajian Linguistik Historis Komparatif*. Metamorfosa Journal, 2(1).
- Wacana, G. I. (2016). *Relasi kekerabatan bahasa-bahasa di Kabupaten Poso*. Jurnal Kependidikan, 6(01).
- Widayati, D. (2018). *Hubungan Kekerabatan Bahasa Nias dan Bahasa Sigulai*. Jurnal Tutur: Asosiasi Peneliti Bahasa-bahasa Lokal (APBL), 4(1), 1-8.