

# Vocabulary Similarity between Old Languages: Bikol, Kapampangan and Tagalog

Andrew Rey Sosa Peña

University of the Philippines

## *Introduction*

Language has the characteristic of being dynamic. It changes in many of its aspects – grammar, pronunciation and vocabulary – as time passes. In this way, two languages can become more similar or different from each other. Similarly, comparison can be made of the same language in its form several centuries ago (old variety) with that of its current form (new variety). One simple way two languages can be compared is by selecting a sample of words with the same meaning from each language and determining how many of those words are similar in both languages. For two words from two languages to be considered similar they have to be pronounced similarly and have the same meaning. In this study, for two words to be considered to have similar pronunciation, they need not have exactly the same pronunciation; rather they are recognizably similar to a casual listener. This study focuses on pronunciation instead of spelling because the same word can actually be spelled in many ways.

The *Ethnologue*, the leading informative list of the world's languages, specifies that when at least 70% of the words between two languages are similar, the two languages are considered mutually comprehensible and are considered dialects of the same language (Lewis, 2017). This study compares the vocabularies of three languages – Bikol, Kapampangan and Tagalog -- by taking a sample of their words in a specific domain (a specific area in which words are related) and finding the percentage of similarity between words. *Old Bikol*, *Old Kapampangan* and *Old Tagalog* are terms used in this study to refer to the form of Bikol, Kapampangan and Tagalog spoken centuries ago and whose vocabulary words were eventually recorded by Spanish friars. *New Bikol*, *New Kapampangan* and *New Tagalog* are terms referring to the languages as spoken today (current form). The study also makes a general comparison of all the sample words between the languages under consideration. For simplification purposes, this study focuses mainly on root words. This paper has appendices that show the actual words used in sampling.

## *Data source*

For obtaining old words used in this study, several dictionaries authored by Spanish friars in the Philippines during the Spanish colonial period were used. For Tagalog, this study made use of the *Vocabulario de la Lengua Tagala* by several authors including Juan de Noceda, Pedro de San Lucar, and the earlier author, Pedro de San Buena Ventura. For Kapampangan, this study utilized the *Vocabulario de la Lengua Kapampangan en Romance* by Diego Bergaño. For Bicol, the *Vocabulario de la Lengua Bicol* by Marcos de Lisboa was used. All three dictionaries have Spanish indexes which enable a researcher to find a word using Spanish words. Such dictionaries are now in different media. Thus, this study utilized physical reprints, digitized versions of the dictionaries particularly in pdf format, as well as

applications (app) both online and offline. One of them is an app entitled *Bergaño Dictionary* by the Center for Kapampangan Studies of the Holy Angel University in Pampanga. This involves typing in a word resulting in retrieval of any existing entry for that word. Another is a website serving as a search engine for Tagalog words in the *Vocabulario de la Lengua Tagala*. This website was produced by San Beda University.

The *Vocabulario de la lengua Tagala* was first published by Fray Pedro de San Buena Ventura, a Franciscan priest, in 1613 in Pila, Laguna. It was used and expanded by the Jesuits Juan Jose Noceda and Pedro San Lucar in publishing their own *Vocabulario de la lengua Tagala* in 1754. It was reissued in 1860. This version is the one translated and published by the *Komisyon sa Wikang Filipino* (KWF).

For obtaining words in the modern variety of the languages, online dictionaries and informants who were speakers of a specific language were consulted. For Bicol, the variety concentrated on was the central dialect of Naga. However, words from other Bicol dialects were also considered and if there was any that corresponded to the old word or with that of other languages, a similarity was recognized. This special case in Bicol is considered because this study assumes that in the modern era, speakers of a dialect in Bicol are familiar with the words of other dialects. Another consideration is that among the dialect centers of Bicol, Naga is geographically closest to Tagalog and Kapampangan. For a word in the geographically farther dialects to be similar to Tagalog and Pampanga, then, is noteworthy. In this study, however, the varieties spoken in Catanduanes and Masbate were not considered as they are considered too far.

### *Instrument*

A wordlist commonly used by field linguists surveying languages was used as a guide in selecting which words would be used as part of comparison. This wordlist was modified to suit the needs of the present research. For one, words which were borrowed from the colonial language, Spanish, were excluded. One such example is the word for fork – *tenedor*. This word is likely to be the same for all languages under investigation because it was introduced by the Spaniards throughout the archipelago and did not exist in pre-colonial times. Also, the wordlist included some words that are considered taboo and not used in polite conversation. These were also excluded so as not to embarrass any informant during the course of data gathering. In addition, words that require elaborate description or required specific cases were also excluded. One such example is the word *carry*. This word requires specific body parts doing the carrying. This would have elaborate description in a dictionary, requiring the researcher to understand passages whose meaning may elude even modern speakers of Spanish. Similarly, the word *good* may have different shades of meaning and may require meticulous examination of the documents written in an old language. This is something beyond my current capacity as the researcher. In addition, because of different shades in meaning, the search for words may extend too much as some words may carry over to others. The wordlist was also purged of any word that is far from basic vocabulary.

The researcher included words that are considered basic vocabulary. This includes ordinal numbers up to ten, salient body parts, relations, common actions and activities, basic cosmology and

ordinary phenomena. However, grammatical words such as pronouns were not included in the sampling because finding these words in the old varieties required reading the grammar sketch written in Old Spanish instead of the dictionaries, a skill that is still beyond my capacity because my Spanish is still very rudimentary.

### Findings

Domain: *Body parts*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		29%	87%	
Old Tagalog	33%	54%		89%
New Bikol	87%			51%
New Kapampangan		85%	36%	56%

Table 1. Vocabulary similarity of languages in the domain *body parts*

As shown in table 1, Philippine languages differ significantly in the domain of *body parts*. Old Tagalog and Old Kapampangan, with a vocabulary similarity of 54%, slightly differed from each other more than between New Tagalog and New Kapampangan, which had a vocabulary similarity of 56%. Some differences in meaning changed during the course of several centuries. For instance, in olden times the Tagalog word *bituca* referred only to the intestines of animals such as chickens, with the word for human intestines being *sicmora*, *sisicmora*, or *casmora*. However, that same word was used in Old Kapampangan to refer to human intestines. After several hundred years, the word *bituca* in Tagalog also became used to refer to human intestines, becoming similar to the word already being used in Kapampangan. Moreover, the Old Kapampangan word for throat changed from *galung-galungan* into *akmulan* in New Kapampangan. Aside from these, there were changes which involved replacing two sounds with only one, such as *ay* into *e* or *ao* becoming *o*. This is process, called *monophonization*, is very common in Philippine languages, particularly in Kapampangan. There were also instances in which two or more words were in existence for a certain meaning in the old language, such as the previously-mentioned *sicmora*, *sisicmora*, or *casmora* for human intestines or *lupa*, *anyo*, or *arap* for face in Old Kapampangan, but then only one word survived to be in use, the others being forgotten. One interesting finding is that the word *katawan* (body) in all three languages come from the word *tao* as shown in the Old Tagalog *catao-an*. The word *katawan* refers to physical humanness while the Tagalog *pagkatao* or its equivalent in the other languages refer to non-physical humanity. As expected, Old Kapampangan and Old Bikol were even farther from each other in terms of vocabulary, having only 29% vocabulary similarity between them. After several centuries, they became a little closer to each other, with New Kapampangan and New Bikol having 36% similarity.

Old Tagalog and Old Bikol had an even less similarity than between Old Tagalog and Old Kapampangan, with only 33% vocabulary similarity. However, this figure increased significantly in the case of New Tagalog and New Bikol, which have 51% similarity. Partially responsible for this significant increase in similarity was that both languages replaced old words with words borrowed from Spanish such as *calvo* (bald) which became *kalbo* and *brazo* (arm) which became *braso* in both languages -- the

words for the same meaning are now the same. Another cause was the shortening of words in Bikol, such as *kikirayon* (eyebrows) in Old Bikol which was shortened to *kiray* in New Bikol and thus became similar to *kilay* in Tagalog. Another example of this is *baliog* (neck) which became *liog* and thus became similar to *liig* in Tagalog.

In the case of the same language, there was a significant change from the old into the new. In the case of Tagalog, Old Tagalog and New Tagalog have 89% vocabulary similarity. For Kapampangan, replacement of whole words resulted in 85% vocabulary similarity between Old Kapampangan and New Kapampangan. In the case of Bikol, the replacement of whole words as well as significant changes in the structure of the same word resulted in 85% similarity between the old and new varieties. Many cases of word change involved shortening of the newer word, such as *kikirayon* (eyebrow) and *baliog* (neck) in Old Bikol to *kiray* and *liog* in New Bikol, respectively. There is also borrowing from Spanish as in the case of *kalbo* (bald) from the Spanish word *calvo*, and *braso* (arm) from the Spanish *brazo*. Such similarity shows that for all three languages the old and new varieties are mutually comprehensible in this domain as this fits the guideline given by the *Ethnologue* (Lewis, 2017) in which languages or varieties having 70% or more vocabulary similarity are considered mutually comprehensible or dialects of the same language.

Several words were notably similar for all languages including the old and new varieties. These are *siko* (elbow), *mata* (eye), *pisngi* (cheek), *kuku* (fingernail), *palad* (palm) and *pusu* (heart).

The actual sample words used for this domain are found in appendix 1.

Domain: *Basic counting numbers*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		91%	100%	
Old Tagalog	73%	91%		100%
New Bikol	100%			67%
New Kapampangan		100%	75%	83%

Table 2. Vocabulary similarity of languages in the domain *basic counting numbers*

Standing out from the rest is the domain of basic counting numbers where the old and new varieties of a language have 100% vocabulary similarity. For this study, only the numbers one to ten, hundred, and thousand were considered because the numbers from eleven to ninety-nine tend to be combinations of the basic ones.

Unlike in other domains, the words in this domain are very similar across languages and even more within the same language across time, as shown in table 2. For instance, Old Tagalog and Old Kapampangan had a high degree of vocabulary similarity, 91%. They became a little different after several centuries with New Tagalog and New Kapampangan now having a vocabulary similarity of 83%. Old Tagalog and Old Bikol expectedly had a lower vocabulary similarity, 73%. They diverged from each other further with New Tagalog and New Bikol now having only 67% similarity. Old Kapampangan and Old Bikol had 91% vocabulary similarity, similar to Old Kapampangan and Old Tagalog. However,

Kapampangan and Bikol have the biggest decrease in similarity, having only 75% similarity between New Kapampangan and New Bikol. Interestingly, the words that are not considered similar across the languages, such as for *two* (*dua, adua, dalaua*) and *three* (*atlo, tulo, tatlo*), are actually recognizable to a careful listener. Many words were similar in all three old languages. These are *isa* (one), *apat* (four), *lima* (five), *anam* or *anum* (six), *pito* (seven), *walo* (eight), *siyam* (nine), *pulu* (ten) and *libo* or *ribo* (thousand).

Within the same language, very little has changed across the centuries. In fact, all three languages have 100% similarity between the old and the new. Thus, basic counting numbers are very mutually comprehensible between the old and new varieties of the same language. Although Spanish words for numbers were borrowed in certain uses, the old words for basic counting numbers have been thoroughly retained and were not replaced in the new varieties.

The actual sample words used for this domain are found in appendix 2.

Domain: *Relationships*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		35%	69%	
Old Tagalog	47%	68%		79%
New Bikol	56%			53%
New Kapampangan		95%	35%	70%

Table 3. Vocabulary similarity of languages in the domain *relationships*

As shown in table 3, the vocabulary similarity of domain of relationships for Tagalog and Kapampangan is somewhere between that of *body parts* and *counting numbers*. Between Old Tagalog and Old Kapampangan, the vocabulary similarity is 68%. This slightly changed to 70% for New Tagalog and New Kapampangan. However, in this domain, Bikol shows a lot of vocabulary difference from the other two languages. For instance, Old Tagalog and Old Bikol had only 47% vocabulary similarity. They became more similar after several centuries with New Tagalog and New Bikol having 53% similarity. Old Kapampangan and Old Bikol had only 35% similarity. This did not change after several centuries. New Kapampangan and New Bikol still have 35% similarity.

For Kapampangan and Tagalog, the old and new varieties are still mutually comprehensible to each other for this domain. However, for Bikol this is no longer the case. Across time, Kapampangan changed very little, having 95% vocabulary similarity between Old and New Kapampangan. In fact, among the sample words, the only difference is the word for *cousin*, which is *nucan* in Old Kapampangan and *pauncacan* in New Kapampangan. Kapampangan, more than Tagalog and Bikol for this domain, involved a lot of changes involving monophonization such as in the case of *bayao* (the same word for both sister and brother-in-law) and *panganay* (eldest brother) in Old Kapampangan becoming *bayo* and *pangane*, respectively, in the new. Also notable for Old Kapampangan is that the word *coya* or *kuya* means a weak structure such as weak flooring. However, after several centuries, New Kapampangan has changed the meaning of the word *kuya* to mean elder brother in the same way that Tagalog does.

Across time, Tagalog changed significantly but still enough for understanding, with a vocabulary similarity of 79% between the old and new varieties.

Bikol on the other hand changed significantly in this domain to the point where the old and new varieties of this same language are no longer mutually intelligible in terms of vocabulary, with only 69% similarity between Old and New Bikol. One reason is that across time, Bikol borrowed many relational words from Spanish such as the word for *sister-in-law* (*cuñada*) while Kapampangan and Tagalog retained their word for *sister-in-law* as well as many others of their old words. Other examples of borrowing are *amay* (uncle) and *inang saro* (aunt) in Old Bikol being replaced by the Spanish words *tiyo* and *tiya*, respectively, in New Bikol.

Yet, all three languages have preserved their words related to the nuclear family. For both Tagalog and Kapampangan, all the words involving the nuclear family did not change across time. For nuclear family words in Bikol, only the word for *older brother* changed across time, from *matua* in Old Bikol to *manoy* or *kuya* in New Bikol.

The words similar for all varieties of all three languages in this domain is *apo* (grandchild) and *pinsan* (cousin).

The actual sample words used for this domain are found in appendix 3.

Domain: *Basic cosmology*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		47%	100%	
Old Tagalog	53%	41%		100%
New Bikol	100%			41%
New Kapampangan		89%	53%	28%

Table 4. Vocabulary similarity of languages in the domain *basic cosmology*

Basic cosmology deals with how people view the larger natural world around them. As table 4 shows, in this domain, Old and New Bikol had 100% vocabulary similarity. In contrast to many other domains, Bikol has retained its old words for basic cosmology. One interesting entry is that *saldang* in Old Bikol refers to the brightness of the sun. In New Bikol this word is now an additional word for *sun* besides *aldaw*, which was also the Old Bikol word for *day*. This is interesting because for a Philippine language to have different words for *day* and *sun* is rare. In the case of Tagalog, both the old and new varieties have 100% vocabulary similarity for this domain. Kapampangan, on the other hand, has only 89% vocabulary similarity between Old and New Kapampangan. This is still sufficient to show that the old and new varieties of Kapampangan are mutually comprehensible.

The three languages in this study have little vocabulary similarity between them for the domain of basic cosmology. Old Bikol and Old Tagalog had only 53% vocabulary similarity. After several centuries, the similarity between them decreased further, with New Bikol and New Tagalog now having only 41% similarity for this domain. Old Bikol and Old Kapampangan had only 47% vocabulary similarity.

However, unlike with Bikol and Tagalog, the similarity between Bikol and Kapampangan increased, with 53% similarity between New Bikol and New Kapampangan. Old Tagalog and Old Kapampangan had only 41% vocabulary similarity between them for this domain. After several centuries, the similarity between them decreased even further. New Tagalog and New Kapampangan now have only 29% vocabulary similarity between them. Notable though is the word *bagyo* (storm). This word is the same for all three languages including their old and new varieties.

None of the three languages borrowed from Spanish for this domain.

The actual sample words used for this domain are found in appendix 4.

Domain: *Common physical actions*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		29%	79%	
Old Tagalog	58%	33%		100%
New Bikol	79%			52%
New Kapampangan		93%	24%	38%

Table 5. Vocabulary similarity of languages in the domain *common physical actions*

As shown in table 5, the domain *common physical actions* showed low vocabulary similarity between the three languages. Old Bikol and Old Tagalog had 58% vocabulary similarity. After several centuries, their similarity decreased even further to only 52%. One reason for this was that the word *tawa* which meant *laugh* in Old Bikol and was similar to Old Tagalog was no longer reported by informants as meaning so. Old Bikol and Old Kapampangan had only 29% vocabulary similarity. This slightly decreased to 24% for New Bikol and New Kapampangan. Except for the word for *eat*, the only similar words between Old Bikol and Old Kapampangan were the words that were similar for all three old languages – *lakad* (walk), *basa* (read), *inom* (drink) and *tangis* (cry). Old Tagalog and Old Kapampangan had only 33% similarity. Their similarity increased to 38% for New Tagalog and New Kapampangan. One reason for the increase is that the word *lundag*, which was not in Old Tagalog, became an additional word for *jump* in New Tagalog, making it similar to the same word in New Kapampangan. Another is that the word *tigil*, which was not in Old Kapampangan, became an additional word for *stop* in New Kapampangan, making it similar to the same word in New Tagalog. Both languages also borrowed the Spanish word *cantar* (sing) into the word *kanta* (sing).

Comparison within the same languages showed various results. For one, Tagalog showed no change between Old Tagalog and New Tagalog – 100% similarity for the sample words. Kapampangan showed 93% similarity between the old and the new but only because one word pair did not exactly fit each other. This word, *quiyak*, was the Old Kapampangan word for the cry of a child, a piglet or the condemned. This has become the New Kapampangan word for *cry*. The Old Kapampangan word for cry was *tanguis* and *lua*. Old Bikol and New Bikol showed 79% vocabulary similarity. One reason for the difference is that several words reported in New Bikol did not exist in Old Bikol or because the words had a different shade of meaning. For instance, the word *hangos* meaning *breathe* in New Bikol did not

mean so in Old Bikol. Also, the word *pondo*, which was reported to mean stop in New Bikol, is not found in the Old Bikol dictionary while *hibi* which means *cry* in New Bikol meant *pout while about to cry* in Old Bikol.

Several words were the same in all three languages including their old and new varieties. These are *inum* (drink), *lakad* (walk) and *basa* (read).

The actual sample words used for this domain are found in appendix 5.

Domain: *Animals*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		38%	91%	
Old Tagalog	51%	48%		100%
New Bikol	91%			36%
New Kapampangan		100%	33%	48%

Table 6. Vocabulary similarity of languages in the domain *animals*

As shown in table 6, *animals* is a domain in which all three languages have high vocabulary similarity between each of their own old and new varieties. Tagalog has 100% vocabulary similarity between the old and the new varieties of the language. Kapampangan also has 100% vocabulary similarity between its old and the new varieties. Bikol has 91% vocabulary similarity between its old and new varieties. Yet, interestingly, Bikol retained its unique word for *pig* which is *orig*. The word for *pig* in both Tagalog and Kapampangan is *baboy* and *babi*, respectively, which was the Old Bikol word for *wild pig*.

The languages in this domain show low vocabulary similarity between languages. Old Tagalog and Old Kapampangan had only 62% vocabulary similarity. Old Tagalog and Old Bikol had only 51% similarity even when some Old Tagalog words were similar to Old Bikol words and vice versa. For instance, another word for *dog* in Old Tagalog was *ayam*, which is the same as both the Old and New Bikol words for *dog*. In the same way, the Old Bikol word for *frog* was *palaca*, which is the same as both the Old and New Tagalog word for *frog*.

Many interesting dynamics occurred in these three languages for this domain. On one hand, Old Tagalog had the word *togac* (frog) which was the same for both Old and New Kapampangan. However, Tagalog did not retain this word in New Tagalog. On the other hand, Bikol had the word *palaca* (frog) which is the same word for both Old and New Tagalog. However, Bikol did not retain this word in new Bikol. Another interesting contrast is the word *pauican*. In Old Tagalog and Old Bikol it means a large sea turtle while in Kapampangan it means a fresh water tortoise or a mountain tortoise. Noteworthy also is that there is no entry for *cow* in any of the old dictionaries of the three languages.

All three words did not borrow from Spanish for this domain. Words that are the same for all the three languages for both new and old varieties are *langaw* (fly), *pating* (shark), and *manok* (chicken). Actually, linguists report that the word *manok* is the same word for *chicken* all throughout many other



languages in the areas where Austronesian, the family of languages to which these three languages belong, can be found.

The actual sample words used for this domain are found in appendix 6.

Domain: *Common characteristics*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		10%	67%	
Old Tagalog	29%	48%		95%
New Bikol	67%			14%
New Kapampangan		95%	5%	43%

Table 7. Vocabulary similarity of languages in the domain *common characteristics*

Common characteristics are descriptive words that are learned at an early age. As shown in table 7, the three languages show very low similarity between each other for this domain. Old Bikol and Old Kapampangan had 10% vocabulary similarity, the lowest between the old varieties of any two languages. This even decreased after several centuries, with New Bikol and New Kapampangan having only 5% similarity. Old Bikol and Old Tagalog had 29% similarity, decreasing even further for New Bikol and New Tagalog at only 14% vocabulary similarity. Interestingly, the Old Bikol word *basa* (wet) which is similar to the word for *wet* in both the old and new varieties of Tagalog and Kapampangan was replaced by the word *dumog* in New Bikol. Old Kapampangan and Old Tagalog had 48% similarity. Their vocabulary similarity slightly decreased for the modern varieties of the two languages at 43%.

Within the same languages for this domain, Tagalog has the highest vocabulary similarity between the old and new varieties at 95%. Some Tagalog words had additional meaning in Old Tagalog. For example, the word *bagal* (slow) additionally meant *lumbering*. It had a similar-sounding variant *bagol* that had the same meaning. Kapampangan has 95% similarity between Old Kapampangan and New Kapampangan. Some sample words in Kapampangan had different meaning in the old variety. For instance, the word *malagad* (slow) in New Kapampangan meant *rare* in Old Kapampangan; the word for *slow* in Old Kapampangan included *lumemay*, *quisao*, *maguinot* and *gulapay*. One sample word in Kapampangan exhibited a behavior called *metathesis* in which two sounds exchange places – *taluras* (slippery) in Old Kapampangan became *tarulas* in New Kapampangan, the *l* and *r* exchanging places. Old Bikol and New Bikol have only 67% vocabulary similarity. Based on the *Ethnologue's* 70% threshold, they have become mutually incomprehensible across time for this domain. A metathesis also occurred in one sample Bikol word. The Old Bikol word for *slow*, *maluyahon*, became *maluhayon* in New Bikol; the *y* and *h* exchanged places.

Among the sample words in this domain, only the word *barato*, *cheap* in New Bikol, was borrowed from Spanish. For this domain, the only word similar in both old and new varieties for all three languages is *babaw* (shallow).

The actual sample words used for this domain are found in appendix 7.

Domain: *human condition*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		11%	79%	
Old Tagalog	42%	47%		100%
New Bikol	82%			32%
New Kapampangan		84%	11%	47%

Table 8. Vocabulary similarity of languages in the domain *human condition*

As table 8 shows, aside from Tagalog having very high vocabulary similarity between its old and new varieties at 100%, Kapampangan and Bikol have fairly high vocabulary similarity between their old and new varieties for the domain *human condition*. Old Kapampangan and New Kapampangan have 84% vocabulary similarity. For this domain, in Kapampangan, none of the new words were products of structural changes in the old words. Instead, the words in Old Kapampangan were replaced by totally new words in New Kapampangan. This includes several words for rich -- *mappapia*, *maquiatin*, *mibandi*, *maquitigtug* – being totally replaced by the word *maqualta*. Old Bikol and New Bikol have 82% vocabulary similarity. For this domain in Bikol, none of the new words were products of structural changes in old words. Instead, all the new words were replacements of totally different words in the old variety. *Donga* (sleepy in Old Bikol) was replaced by *pipiro*t in New Bikol. Similarly, the words *makanos* and *pangit* replaced the words *maracsot*, *masiuaua* or *masauaua* to mean *ugly*.

Old varieties of the three languages had low vocabulary similarity between them. Old Bikol and Old Kapampangan had only 11% vocabulary similarity. Old Bikol and Old Tagalog had 37% similarity. Old Kapampangan and Old Tagalog had 47% similarity. After several centuries, only one change happened. New Bikol and New Tagalog have 32% similarity, a decrease from the previous 42% between the old varieties. The vocabulary similarity between New Bikol and New Kapampangan remains at 11%. New Kapampangan and New Tagalog have 47% similarity, no change from old to new.

Except for the word *maqualta*, *rich* in New Kapampangan, no word was borrowed from Spanish for this domain. If not for this word, the word *mayaman* (*rich*) would have been the same for all varieties of the three languages. However, only the words *magalang* (*polite*) and *pagal* (*tired*) were the same for all varieties of all the three languages for this domain.

The actual sample words used for this domain are found in appendix 8.

Domain: *food*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		14%	60%	
Old Tagalog	47%	44%		100%
New Bikol	60%			38%
New Kapampangan		69%	19%	41%

Table 9. Vocabulary similarity of languages in the domain *food*

As table 9 shows, in the domain *food*, the three languages had low vocabulary similarity. Old Bikol and Old Kapampangan had 14% vocabulary similarity. The only words similar between them were *sabaw* (broth or soup) and *asin* (salt), which are the same for all three languages. After several centuries, their vocabulary similarity increased slightly with New Bikol and New Kapampangan having 19% similarity. This was because one sample word in Bikol changed; the word for *vegetable* in Old Bikol, *bangot*, was replaced by the word *gulay* in New Bikol. This word is similar for all the new varieties of all three languages. Old Bikol and Old Tagalog had 47%. Similar words between them include *tubig* (water) and *suka* (vinegar). After several centuries, the similarity between Bikol and Tagalog decreased to 38%. One similar word between Old Tagalog and Old Bikol, the word for *lunch*, *pamahao*, disappeared from both New Bikol and New Tagalog. Old Kapampangan and Old Tagalog had 44% vocabulary similarity. Similar words between them include *panalangin* (pray) and *ulam* (viand). After several centuries, the vocabulary similarity between them decreased a little; New Kapampangan and New Tagalog have 41% similarity. One word similar between Old Kapampangan and New Kapampangan that became different for the new varieties is the word for viand. For the old varieties it was *ulam*. For New Tagalog it is still *ulam* but for New Kapampangan it became the word *asan*. This word used to refer only to *fish* as viand in Old Kapampangan.

Comparing the same language across time for this domain, Old Tagalog and New Tagalog have 100% vocabulary similarity. Old Kapampangan and New Kapampangan have 69% vocabulary similarity, not enough to consider the old and new varieties to be mutually comprehensible. As common to Kapampangan, a *monophonization* (replacing two sounds with only one) occurred for two words. The word *sabaw* (broth) in Old Kapampangan became *sabo* in New Kapampangan, with the two sounds *aw* being replaced by *o*. Also, the word *gulay* (vegetable) became *gule*, with the two sounds *ay* being replaced by *e*. Old Bikol and New Bikol have 60% vocabulary similarity, not enough to consider the old and new varieties to be mutually comprehensible for this domain based on the 70% threshold given by the *Ethnologue* (Lewis, 2017).

The words common for all three languages for both old and new varieties are *sabaw* (broth or soup) and *asin* (salt). Only one language, Tagalog, borrowed from Spanish for this domain. Even for its old variety, Tagalog had already likely borrowed a word from Spanish. This word is *almorzar* (lunch). However, Old Tagalog used this word in its borrowed form, *amosal*, to refer both to breakfast and lunch. New Tagalog also borrowed this word from Spanish, with its borrowed form as *almusal*, but to refer only to breakfast and not to lunch as its original Spanish meaning was.

The actual sample words used for this domain are found in appendix 9.

Domain: *Virtues*

	Old Bikol	Old Kapampangan	New Bikol	New Tagalog
Old Bikol		40%	43%	
Old Tagalog	47%	73%		93%
New Bikol	43%			67%
New Kapampangan		93%	36%	64%

Table 10. Vocabulary similarity of languages in the domain *virtues*

Table 10 shows a varied picture of vocabulary similarities between the old and new varieties of each language for the domain *virtues*. Old Tagalog and New Tagalog have high vocabulary similarity at 93%. The only word change in Tagalog among the sample words for this domain is the word for *justice*. In Old Tagalog it was *catapatan* while in New Tagalog it is *katarungan*. Old Kapampangan and New Kapampangan also have 93% similarity. The only word change in Kapampangan among the sample words for this domain is the word for *gentle*. The Old Kapampangan word for this was *mamamo* while the New Kapampangan word is *mapinu*. Old Bikol and New Bikol have 43% similarity. Bikol had changed significantly that there is no more mutual intelligibility between the old and new variety for this domain.

Across languages, there was low similarity between the old varieties and even lower for the new varieties except between New Bikol and New Tagalog. Old Bikol and Old Tagalog for instance had 47% similarity. Old Bikol and Old Kapampangan had even lower similarity at only 40%. Old Kapampangan and Old Tagalog, however, had 73%, enough for them to be considered mutually comprehensible for this domain. After several years, the similarity between New Bikol and New Tagalog increased significantly to 67%. However, the similarity between New Bikol and New Kapampangan decreased even further to only 36%. Similarly, the similarity between New Kapampangan and New Tagalog decreased slightly to 64%.

Common to all languages including old and new varieties were the words for *industrious* (*sipag*) and *holy* (*banal*).

Several words were borrowed from Spanish. Both New Tagalog and New Bikol borrowed the Spanish word *justicia* for justice. Both New Tagalog and New Kapampangan borrowed the Spanish word *fino* (modified into *pino*) for gentle or well-mannered. Old Tagalog had already borrowed the Spanish word *santo* for holy.

The actual sample words used for this domain are found in appendix 10.

#### *Over-all comparison between old languages*

##### Old Bikol and Old Kapampangan

Domain	Similar	No. of words compared	Similarity between Old Bikol and Old Kapampangan
Body parts	10	35	29%
Basic counting numbers	10	11	91%
Relationships	6	17	35%
Basic cosmology	8	17	47%
Common physical actions	6	21	29%
Animals	8	21	38%
Common characteristics	2	21	10%
Human condition	2	19	11%

Food	2	14	14%
Virtues	6	15	40%
Total	60	170	35%

Table 11. Over-all similarity between Old Bikol and Old Kapampangan

As table 11 shows, the over-all vocabulary similarity between Old Bikol and Old Kapampangan was 35%. Old Bikol and Old Kapampangan were very different from each other. Except from the domain basic counting numbers in which Old Bikol and Old Kapampangan had 91% vocabulary similarity, the two languages had very low similarity between them especially for the domains *common characteristics, human condition* and *food* where the similarities were at the low tens.

#### *Old Bikol and Old Tagalog*

Domain	Similar	No. of words compared	Similarity between Old Bikol and Old Tagalog
Body parts	13	39	33%
Basic counting numbers	8	11	73%
Relationships	8	17	47%
Basic cosmology	9	17	53%
Common physical actions	11	21	52%
Animals	12	21	57%
Common characteristics	6	21	29%
Human condition	8	19	42%
Food	7	15	47%
Virtues	7	15	47%
Total	89	196	45%

Table 12. Over-all similarity between Old Bikol and Old Tagalog

As table 12 shows, the over-all vocabulary similarity between Old Bikol and Old Tagalog was 45%, significantly higher than between Old Bikol and Old Kapampangan. Old Bikol and Old Tagalog were very different from each other. Except from the domain basic counting numbers in which Old Bikol and Old Tagalog had 73% vocabulary similarity, the two languages had very low similarity between them especially for the domains *body parts* and *common characteristics* where the similarities were at around 30%.

#### *Old Tagalog and Old Kapampangan*

Domain	Similar	No. of words compared	Similarity between Old Tagalog and Old Kapampangan
Body parts	22	41	54%
Basic counting numbers	10	11	91%
Relationships	12	18	67%
Basic cosmology	7	17	41%
Common physical actions	6	19	32%
Animals	13	21	62%

Common characteristics	10	21	48%
Human condition	9	19	47%
Food	7	16	44%
Virtues	11	15	73%
Total	107	198	54%

Table 13. Over-all similarity between Old Tagalog and Old Kapampangan

As table 13 shows, the over-all vocabulary similarity between Old Tagalog and Old Kapampangan was 54%, the highest between the three but still low. Old Tagalog and Old Kapampangan were very different from each other. Except for the domain *basic counting numbers* in which Old Tagalog and Old Kapampangan had 91% vocabulary similarity, the two languages had very low similarity between them especially for the domain *common physical actions* where the similarity was 32%.

#### Summary for each language

##### Bikol

Domain	Similarity between Old and New Bikol
Body parts	87%
Basic counting numbers	100%
Relationships	69%
Basic cosmology	100%
Common physical actions	76%
Animals	91%
Common characteristics	67%
Human condition	79%
Food	69%
Virtues	43%
All domains	80.3%

Table 14. Summary of vocabulary similarity of between the old and new varieties of Bikol for all domains

As table 14 shows, for most domains, Old and New Bikol have high vocabulary similarity such that they can be considered dialects of the same language. Exceptions to this include the domain of relationships in which the similarity is only 69%, below the 70% threshold given by the Ethnologue. Another is the domain common characteristics in which the similarity is only 67%. Also, in the domain *food*, the two varieties only have 69% similarity. The lowest similarity between Old and New Bikol is in the domain *virtues* with only 43% similarity. Notable domains are *basic counting numbers* and *cosmology* in which the similarity between the old and new varieties is 100%. Combining all the domains together, the vocabulary similarity between Old and New Bikol is high at 80.3%.

##### Kapampangan

Domain	Similarity between Old and New Kapampangan
--------	--

Body parts	85%
Basic counting numbers	100%
Relationships	95%
Basic cosmology	89%
Common physical actions	93%
Animals	100%
Common characteristics	95%
Human condition	84%
Food	69%
Virtues	93%
All domains	89.7%

Table 15. Summary of vocabulary similarity of between the old and new varieties of Kapampangan for all domains

As shown in table 15, Old and New Kapampangan have high vocabulary similarity except in the domain *food*, with only 69% similarity between the old and new varieties. Notable are the domains *basic counting numbers* and *animals* which both have 100% similarity between Old and New Kapampangan. Combining all the domains together, the vocabulary similarity between Old and New Kapampangan is high at 89.7%.

#### Tagalog

Domain	Similarity between Old and New Tagalog
Body parts	89%
Basic counting numbers	100%
Relationships	79%
Basic cosmology	100%
Common physical actions	100%
Animals	100%
Common characteristics	95%
Human condition	100%
Food	100%
Virtues	93%
All domains	94.6%

Table 16. Summary of vocabulary similarity of between the old and new varieties of Tagalog for all domains

As shown in table 16, there is very high vocabulary similarity between Old and New Tagalog, the lowest being 79%, in the domain *relationships*. Old and New Tagalog have 100% similarity in the domains *basic counting numbers*, *basic cosmology*, *common physical actions*, *animals*, *human condition* and *food*. Combining all the domains together, the vocabulary similarity between Old and New Tagalog is very high at 94.6%.

#### Conclusion

The old varieties of Bikol, Kapampangan and Tagalog had low vocabulary similarity. Old Bikol and Old Tagalog were closer to each other than Old Bikol and Old Kapampangan, a fact predictable because the language areas of Tagalog are much closer to Bikol than the language areas of Kapampangan are.

Speakers speaking the old and new varieties of each language would have been able to understand each other. With a vocabulary similarity of 94.6%, Old and New Tagalog can be considered dialects of the same language. Speakers of Old and New Tagalog could have understood each other. With a vocabulary similarity of 89.7%, Old and New Kapampangan can be considered dialects of the same language. Speakers of Old and New Kapampangan could have understood each other. With a vocabulary similarity of 80.3%, Old and New Bikol can be considered dialects of the same language. Speakers of Old and New Bikol could have understood each other.

The pattern noticeable at this point is that some Bikol words tend to change across time to become more like Tagalog words. In contrast, Tagalog words do not tend to change to become like Bikol words. In addition, Bikol also tends to borrow from Spanish more than Tagalog or Kapampangan do. Vocabulary similarity between the old and new varieties of Kapampangan is considered high if the differences between words caused by monophonization – two sounds becoming one, such as *baboy* (pig) becoming *babi* – is disregarded. Also, some Kapampangan words become similar to Tagalog words across time. A very common cause for vocabulary change for all languages is borrowing from Spanish.

### *References*

- Bergamo, Diego (1860). *Vocabulario de la Lengua Pampanga en Romance*. Manila: Imprenta de Ramirez Y Giraudier. Retrieved from <http://books.google.com>
- Center for Kapampangan Studies (n.d.). *Bergamo dictionary*. Angeles City: Holy Angel University
- Komisyon sa Wikang Filipino (2014). *Vocabulario de la Lengua Tagala*. Manila: Komisyon sa Wikang Filipino
- Lewis, M. P. (2017). *Ethnologue: languages of the world*. Dallas: SIL International
- Lisboa, M. (1865). *Vocabulario de la Lengua Bikol*. Manila: Establecimiento Tipografico del Colegio de Santo Tomas. Retrieved from <http://books.google.com>
- Noceda, J. and Sanlucar, P. (1860). *Vocabulario de la Lengua Tagala*. Manila: Imprenta de Ramirez Y Giraudier. Retrieved from <http://books.google.com>



Appendix 1. Sample words used for the domain *body parts*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
arm	tacyag	takyag, braso	tacday	gamat	camay	bisig, braso
armpit	yocyoc	yocyoc, kilikili, yuka	quiliquili	kilikili	qiliqili	kili-kili
bald	pagnas, opao	karos, kalbo, upaw	no entry		opao opauin	kalbo
belly	tulac	tuyan, tulak			sicmora, sisicmora, casmora	tiyan
blind	bota	buta			bulag	bulag
blood	dugo	dugo	dayi	daya	dogo	dugo
body	hauac	lawas, hawak, ginahawa	catauan	katawan	catao-an	katawan
bone	tolang	tolang, tulang	butul	butul	bot-o	buto
brain	no entry	hotok	utac	utak	caymotan, otac, bait, cabaitan	utak
check	pisngi	pisngi, koko	baling, pisngi	pisngi	pilipisan, pisngi	pisngi
chin	coco	koko, baba				baba
ear	taligna	talinga, taringa	balugbug	balugbug	tainga	tainga
elbow	sico	siko	sico, singquil	siku	sico	siko
eye	mata	mata	mata	mata	mata, busilig, boliga	mata
eyebrows	quiquirayon	kiray	quilai	kile	quilay	kilay
face	lalaugon	pandok, lalawgon, hawong	lupa, anyo, arap	lupa	muc-ha	mukha
finger	moro	guramoy	taliri	taliri	daliri, galamay	daliri
fingernail	coco	kuko	cucu, cucul	kuko	coco	kuko
foot	bitis, caramoy	bitis, siki	bitis	bitis	paa	paa
forehead	agnog	angog	canuan; tangad, tulid, arap	kanuan	noo	noo
white hair	oban	bulaw	uban	uban	oban	uban
hand	camot	kamot	gamat	gamat	camay	kamay
hair	bohoc	buhok, bwuk	buac	buak	bohoc	buhok

head	payo	payo, uro	buntuc	bentuk	olo	ulo
heart	poso, oo, boot	puso	pusu, busal	pusu	poso	puso
intestines			bitoca	bituka	laman sa loob	bituka
knee	tuhod	tuhd	tud	intud	tahor	tuhod
leg	tabay, tignoc	tabay	butit	bitis	binti, butit, butic	binti
lip	gnodoy, gnimot, gnabil	ngabil, ngiwa	labi	labi	labi, ngoso, ongos	labi
liver	catoy	katoy	atay, bicquia	ate	atay	atay
lungs			baga	baga	tapi, baga	baga
mouth	ngoso	ngusu	asboc, bunganga	asbuk	bonga	bibig
nape	loong	loong	tungdon	tundun	batoc	batok
navel	posod	pusod	pusad	pusad	posor	pusod
nose	dagno	dongo, orong	arung	arung	ilong	ilong
palm	palad	palad	palad	palad	palad	palad
righthand	matanos		tulid	wanan gamat	canan	kanan
shoulder	abaga	abaga, takyag	cayo, pagao	pago	balicat	balikat
skull	no entry		bican	bungo	bongo	bungo
thigh	paa	piad	ita, puad	puad	hita	hita
throat	baliog	halunan	galung galungan	akmulan	lyig, lalamonan, lalaogan	lalamunan
neck	baliog	liog	batal	batal	liig	leeg
teeth	gnipon	ngipon, tingo	ipan	ipan	ngipin, ipin	ngipin, ipin

Appendix 2. Sample words used for the domain *basic counting numbers*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
one	saro, isa	saro	isa	metung, isa	isa	isa
two	dua, tigduadua	duwa	addua	adwa	dalaoa, dal-wa	dalawa
three	tolo	tulo	atlo	atlu	tatlo, itlo	tatlo
four	apat	apat	apat	apat	apat	apat
five	lima	lima	lima	lima	lima	lima
six	anom	anum	anam	anam	anim	anim
seven	pito	pito	pitu	pitu	pito	pito
eight	ualo	walo	ualo	walu	ualo	walo
nine	siam	siyam	siam	syam	siyam	siyam
ten	polo, sangpolo, tangob	sampulu	apolo	apulu	polo, pouo, pu, sampu	sampu
hundred	gatos, sanggatos	sanggatos	dinalan	dinalan	daan	daan
thousand	ribo, sangribo	ribo	libo	libo	libo	libo

Appendix 3. Sample words used for the domain *relationships*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
grandmother	apo	pakuapoon, lola	nunu	apu, nunu, lola	bayi, indo, apo, nono, inda poon, nanay, impo	lola
grandfather	apo	pakuapoon, lolo	nunu, apo	apu, ingkung, nunu, lolo	amba-poon, nono, apo, amba, mamay, ama	lolo
sister-in-law	hipag	konyada	bayao	bayo	hipag	hipag
brother-in-law	bayao	bayawon	bayao	bayo	bayao	bayaw
grandchild	apo	apo	apo	apu	apo	apo
father	ama	tatay	ibpa	tata, tatang, ibpa, igpa	amang, ama, tata, tatang, bapa	ama, tatay, tata
cousin	pinsan	pinsan, prima, primo	pisan	pisan	pinsan	pinsan
nephew, niece	macoyna, macoamay	pamangkin	nucan	pauncacan	pamanngquin	pamangkin
mother-in-law	panugangan	panugangan	catuyangan	catuangan	bianan	biyenan
father-in-law	amay	tiyo, tiyoon, amaon	bapa	bapa, mama	caca, mama, amain, amba	tiyo, tito
eldest child	matua	matua	panganay	pangane	anay, panganay	panganay
youngest child	no entry	bunso	bungso	bungsu	bongso	bunso
spouse	agom	agom	asaua	asawa	asawa	asawa maybahay
sibling	tugang	tugam, tugang	capatad	kapatad, kaputul	capotol, capatid	kapatid
child	aqui	aki	anac	anac	anac	anak
mother	ina	ina	indo, inda	indu, inda, ima, inang	inda, ina, nanay, ima	ina, nanay, inay, inang
elder brother	matua	manoy, kuya	caca	coya, kaka	caca, ca, coya	kuya
aunt	inang saro	tiya	dara	dara, nana	ali, inda, daga, bayi	tiya, tita

Appendix 4. Sample words used for the domain *basic cosmology*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
cloud	pangnanoron	panganoron	biga	biga, lulam	ulap, alapaap, himpapawid, papauirin	ulap
rain	oran	uran	oran, lintic	muran	olan	ulan
sun	aldao	saldam, saldang, aldaw	aldao	aldo	arao	araw
moon	bulan	bulan	bulan	bulan	buan	buwan
storm	bagyo	bagyo	sigua, bagguio	bagyu	bagyo, onos	bagyo
land	daga	daga	gab-bon	loti, gabun	lupa	lupa
earth	quinaban	kinaban	yato	yatu	sansinucob, santinakpan, daigdig	mundo, daigdig, sanlibutan, sansinukob
night	bangue	banggi	bengi	bengi	gab-i	gabi
day	aldaw	aldaw	aldao	aldo	arao	araw
star	bitoon	bituon	batuin, daguis	batuin	bitoin	bituin
falling star	bulalacao	bulalakaw	bolalacao, alias, taclan batuin	mebaldug bituin, taklang batuin	bulalacao	bulalakaw
air	doros	duros	angin	angin	hangin	hangin
morning	aga	aga	abac, bucas	aga, abak	omaga, bukas, boas	umaga, aga
noon	odto	udto	magurung	ugtu	tanghali, tanghaling tapat	tanghali
afternoon	hapon	hapon	gatpanapon	atpanapun	hapon	hapon
thunder	linti, dagolgol	dagulgol, dalugdug	acbong, duldul	duldul	colog	kulog
lightning	quiquilat	kitkilat	quildap	kikidlat, mangidlat	quirlat, quilat	kidlat
sky	langit, orogan	langit	banua	banua	langit, languit- languitan	langit, alapaap

Appendix 5. Sample words used for the domain *common physical actions*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
play	cauat	magkawat	along	mamyalung	laro, sugal, botingting	laro
sitdown	tucao	magtukaw	lucluc, maca	lukluk	opo, licmo, locloc	upo
stand up	tindog	magtindog	ticdao	tikdo	tayo, tindig, tulay	tayo, tindig
breathe	guinhaua	maghangos	isnaua	mangisnaua	hinga	hinga
eat	cacan	magkaon, kakan	asan, putat, can, mangan	mangan	cain	kain
cry	tangis, bacho	hibi	tanguis, lua	kiyak	tangis, iyac	iyak, tangis
laugh	tatawa	giolok, ngirit	ayli, guiguit, catiqui, mayli	maili	taoa	tawa
see	hiling	mahiling	aquit	akit	quita, nita, tingin	kita, tanaw
drink	ynum	inom	inum	minum	inom	inom
walk	lacao, lacad	lakad, lakaw	lacad	lakad	lacad	lakad
stop	ontoc	pondo	tuknang,	patugul, tuknang, tumigil	tahan, higcat, tiguil, togot, humpay, tantan	tigil, hinto
jump	locso, talon	lukso	lundag	lundag	locso	talon, lukso, lundag
lie down	higda	higda	ulid, quera	kera	higa, tihaya	higa
run	dalagan	dalagan	pulayi	maulai, pulayi, mamulandi	tacbo	takbo
dance		sayaw, tarok	terac	terak	indac, sayao	sayaw
bow	doco	busog	duco	duku, saludu	yoco	yuko
tie	bogkus, gapus	bugkus	tali, tubung, aptas	tali	binlo, igquis, cacot, bigquis, tali	tali
sing	awit	awit, kanta	dalit	dalit, kante, gumale	ait	awit, kanta
kneel	lohod	luhod	siclaud	siklod	ticlohor, paniclohor, lohor	luhod
read	basa	basa	basa	mamasa, basan	basa	basa
sweep	sighid	sigid	palis	palisan, mamalis	ualis	walis

Appendix 6. Sample words used for the domain *animals*

English	Old Bikol	New Bikol	New Kapampangan	Old Kapampangan	Old Tagalog	New Tagalog
spider	laua	lawa	babagua	bagua, gangato, gagamba	lalaua, gagamba, cotocoto	gagamba
bird	gamgam, yamon	gamgam, bayong	ayup	ayop	ibon	ibon
goat	canding	kanding	kambing	cambing, tulucambing	cambing	kambing
shrimp	boyod	boyod	paru	parao, ulang, acla	hipon	hipon
pig	orig	orig	babi	babi	babuy	baboy
cat	ycos	kuting/ ikos	pusa	pusa	pusa	pusa
bark	batoc	nagbabatok	tangke	tangke	tahol, holhol, cahong, alolong, cangcang, taquin	tahol
fly (insect)	langao	langaw	lango	langao	langaw	langaw
mosquito	namok	namok	amuk	yamoc, nicnic, sibaung	lamoc, namoc	lamok
bat	colapnit, managbac, paniqui	kulapnit	talibatab	talibatab	paniqui, bayacan, baculao, cabag, cacabag, colagnit, calabiang	paniki
dog	ayam	ayam	asu	aso	aso, ayam, banagan	aso
fish	sira	sil/sira	asan	asan	isda	isda
feather	loui	dutdut	bulbul	bulbul	pacpac, balahibo	balahibo
chicken	manuc	manok	manuk	manoc	manuc	manok
chick	siwo	siwo			sisiw	sisiw
frog	talapang, palaca, cabacab	talapang	tugak	tugac	palaca, cocac, togac	palaka
mouse	quino	kino	dagis	daguis	daga	daga
snake	yragos	halas	ubingan	ubingan	ahas	ahas
shark	yho, pating	pating	pating	pating	pating	pating

turtle	pauican, pagong	baho	pauican	pauican	pabiyo, calahan, tocmol, pahas, labilabi, pauican, pag-ong	pagong
louse	coto	kuto	kutu	cutu	coto	kuto
carabao	carabao, damulag	kalabaw, damulag	damulag	damulag	damolag	kalabaw, damulag



Appendix 7. Sample words used for the domain *common characteristics*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
wide	halacbang	halakbang	lapad, liualas	malapad	lapar, louang, lauac	malapad
hot	maynit	mainit	pali	mapali	init	mainit
short	hayepot, halipot	halipot	cuyad	makuyad	icli, icsi, igsi, capos, otdo	maikli
fragrant	mahamot	mahamot	banglo	mabanglu	mabango	mabango
cold	malipot	malipot	dimla, tingga	marimla	malamig, ngologhoy, guinao	malamig
long (spatial)	halaba	halaba	macaba, mababa	makaba	uayuay, haba, labay, lauig, lamba	mahaba
slow	maluyahon	maluhay, maluhayon	lumemay, quisao, maguinot, gulapay	malagad	macupad, mabagol, mabagal, masagal	mabagal
wet	basa	dumog	basa	mabasa	basa	basa
new	bareta, bago	bago	bayo	bayu	bago	bago
dark	madiclom	madiklom	dalumdum	madalumdum	ngapngap, dilim	madilim
small	sadangot, sadayot, sadiyot, sadang	sadayot	lati	malati	munti, onti, mongsing, balibalian, montic	maliit
shallow	hababaw	hababaw	mababao	mababo	babao, hambao	mababaw
deep	bagot	hararom	malalam	malalam	baliuag, sauang, lalim, colatcolat	malalim
slippery	mahalnas	mahalnas	dulas, taluras	matarulas	dapilos, dulas, biso, sala	madulas
dry	tiga, atyan	mamara	malangi	malangi	tuyo, iga, paingang	tuyo
dirty	marupit	mati	marinat	marinat	sauo, marumi, lamas, gam-an, amo	madumi

bad	maraot	maraot	dauac, daual, marauac	marok	sama	masama
big	dacula	dakula	dagul	maragul	daquila, malaqui	malaki
cheap	sahol	barato	mura	mura	mora	mura
clean	malinig	malinig	malinis	malinis	pagi, malinis	malinis
clear	sayod	hilingon	malinao	malino	linao, balasina, banaag	malinaw

Appendix 8. Sample words used for the domain *human condition*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
industrious	mahigos	mahigos, mahigoson	masipag	masipag	masipag, masigla, mabisa	masipag
lazy	maooyamon, mahogacon	hogakon	tamad, tungango, talungco	matamad	tamad, pangcal	tamad
noisy	riboc	maribok, maribokon	maingay	mainge	ogong, ingay, lingal	maingay
ugly	maracsot, masiuaua, masauaua	makanos, pangit	nauang, dauac, daual	matsura	lupit, pangit, gatol, daual, dumal	pangit
angry	anggot	dagit, anggot	asbo, casbo	mimwa	ngalit, tongo, hinampo, poot, tampo, bosa, balangquinitan	galit
happy	ogma	maogma	masaya	masaya	malologdin, masaya	masaya
pregnant	bados, nagdadara	bados	buctut	mabuktut	buntis, cabuntisan	buntis
tall	halangcao	halangkaw	matas	matas	lampao. alipapao. Talaroc, ayangé, Taas	mataas, matangkad
old	matanda, magurang	gurang, gusngab, gosgos	matua	matua	matanda, loma	matanda, luma, gurang
beautiful	magayon	magayon	masampat, malago, santing	masampat, malagu, masanting	buti, ganda	maganda, mayumi
sad	mondo	mondo, mamondo	lungcut, bitquil. Salbat, lugma	malungkut	malumbain, longcot, panglao	malungkot
hungry	gotom	nagugutom, napupunaw, pipunaw	danupan	danupan	gotom, hoyong	gutom
sleepy	donga	pipiro	matudtud, paltudturan	matudtud	antoc, tuca	inaantok, antok
tired	capuy, yaya, pagal	matanglay, matanglayon, pagal	pagal, tical	pagal	pagor, pacang, pagal	pagod, hapo, pagal

full	basog	basog, pano	mababsi, masabsi	mabsi	bosog	busog
poor	ducha, mirot	tius	calulu, mapusa, maluca	kalulu, lipit	docha, salanta, pulubi, abocanin, maralita, mahirap	mahirap, dukha
rich	mayaman	mayaman	Appia, mappapia, maquiatin, mibandi, maquitigtug	maqualta	mayaman, guinhaua, mapilac, causa, sgana, saua	mayaman
polite	magalang	magalang	magalang	magalang	magalang, mapitagan, matinging, mahinhin	magalang
thirsty	paha	makapaha	mauo	kumau	ohao	uhaw

Appendix 9. Sample words used for the domain *food*

English	Old Tagalog	New Tagalog	Old Kapampangan	New Kapampangan	Old Bikol	New Bikol
water	tubig	tubig	danum	danum	tubig	tubig
choke	samir, hirin, bol-on	nabulunan, nasamid, nahirinan	luay, manluay	mabaknal	london, landan	piot, puot, lamos, nailudnan
lunch	pamahao, amosal, pananghalian	tanghalian	abac, manabac	pagtuan	nangangaga, pinangangaga, aga, nari, bahao	pangudtuhan, pahingalo
broth	sabao	sabaw	sabao	sabo	sabao	sabaw
supper	haponan	hapunan	yapon, mapon, manapon	mapun		pamanggihan
delicious	masarap, malasa	masarap, malinamnam, malasa	uili, malinamnam, yama, lasa, ligatgat	kanyaman, malinamnam (meat or soup only)		masiram
breakfast	amosal	agahan, almusal	manabac-nabac	abakan, almusal	aga, nari, bahao	pamahaw
chew	nguya, ngata, yangongo	nguya	ngabngab, cabcab, langut	ngata, ngatngat, langut	sapa	sapa
spicy	maascang, maanghang, mahanghang	maanghang	paras, maparas, canyamanan	pakalasa	harang	maharang
dessert	himagas	himagas		pagmayumu	honhon, napa, hori	hamis
pray	panalangin, dalangin, dasal	dasal, manalangin	panalangin	mangadi, manalangin	mibi	mibi
salt	asin	asin	asin	asin	asin	asin
dip	saosauan, hidhiran	sawsawan	tiltilan	tiltilan, barali	sinasaosauan	sawsawan
swallow	lonoc, lonlon, alonlon, lolon	lunok, lulun	malmon	akmul	timoc, halon	halon, tulun
vegetables	auoy, gulay	gulay	auoy, mauoy, gulay	gule	bangot	gulay
vinegar	suca	suka	aslam	aslam	suca	suka
viand	olam	ulam	ulam	asan	sabloc	sira

Appendix 10. Sample words used for the domain *virtues*

English	Old Bikol	New Bikol	Old Kapampangan	New Kapampangan	Old Tagalog	New Tagalog
love	boot,	moot, daba, dangat	huri, sinta, lugud	malugud	pag-ibig, palayao, guiliu, irog, sinta, liyag	pag-ibig, pagmamahal
honest	sadop	kamatoodan, tapat	datna		matimtim, timitiman, tapat	tapat
gentle	hamis	kahoyuan	mamamo	mapinu	banig, maamong loob, malubay na loob, mabayang loob, maalam na loob	mahinhin, maamo, pino
justice	saysay, banal	hustisiya	bala, talaro	katararuan	cabananan, catapatan, catuiran	patas, makatarungan, hustisiya
holy	banal	banal	banal	banal	santo, banal	banal
trust	halat	tiwala	mapaniwala	apaniwalan	tiwala, salig, paniwala, asa, panalig, manampalataya	tiwala, pananampalataya, pananalig
help	asod, tabang	tabang	saup	mapanyaup, saup	tolong, saclolo	tulong, saklolo
brave	malangalanga, madasig	matapang	matapang	matapang	papalongin, bayani, matapang	matapang
wise	manoot	matalino	balo	mabeluan	siyac, pantas, paham, bihasa, marunong, matalinong	matalino
honor	galang	galang	galang, dangal, puri, damla	damla, dangal, karangalan	galang, onlac, pitagan, puri, sanghaya, dangal	dangal, karangalan
hope	sarig, laom	paglaom	alig, palapaya, asa	kapanayan, pag-asa, magnasa	panalig, pananalig, asa	pag-asa
forgive	tauad, para, day, dey	patawada	tawad, upaya	panupaya	patauar	patawad
true	nonoo, totoo, catotoohan	totoo	tunay, tutu, tuntun	tune	totoo, tunay, catotohanan, catunayan	totoo, tunay

industrious	bicas, sipag, dahom, mahauol, mahigos, maorop	masipag	masipag	masipag	bisa, mabisa, masipag, masigla	masipag
careful	maboot,	ingat	mingat	maingat	maingat	maingat