Backtracking Indo-European languages influence on Indonesian

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ABSTRACT

Indo-European languages are the focus of this study which emphasized the influence of those languages on the Indonesian lexicon and linguistic diversity. In order to reach the goal of this work, diachronic and synchronic analysis were employed. Diachronic analysis referred to the theory of loanword form reconstruction stated by Mallory & Adams (2006) and borrowing process theory by Campbell (1998), while the synchronic analysis included loan type identification mentioned by Swe (2013). Consequently, the existence of *Petjuk* or *Petjoh* was identified as the diffusion of Dutch and Indonesian. There are also Portuguese family names which spread widely especially in East Indonesia and loanwords found. These loanwords are derived from mostly Germanic, while Indo-Iranian, Italic and Hellenic contributed also. Germanic languages, e.g. Dutch, German and English, and Portuguese as part of Italic supplied more loanwords for their long-lasting existence throughout the archipelago in the past during their colonization, while Indo-Iranian such as Sanskrit, Pali, Persian and Hindi gave their influence for coming into contact with Indonesians through trading activity. The only one Hellenic, e.g. Greek, and other Italic which are Latin and French became the donor through luxury loan for the need Indonesians acquire to translate some new terms which couldn't be accommodated by Indonesian itself.

Keywords: Indo-European, loanwords, Indonesian

INTRODUCTION

Indonesia is one of largest countries in the world, which had been colonized by at least five different nations. As the consequences, there are quite a few influences that were given by those nations, including language. Until these days, the influence of those nations could still be seen, e.g. (1) loanwords from Portuguese, Dutch, Japanese, German and even English; (2) family names from Portuguese in Nusa Tenggara Timur or East Nusa Tenggara; (3) Christianity spread by Dutch and Spanish, etc. This fusion occurred not only for being colonized by those countries, but also as the after-effect of trading activities existing in Indonesian archipelago which involved traders from Indo-Iranian areas, e.g. natives of Sanskrit, Persian, Hindi and Pali. As the result, loanwords adopted from Sanskrit dan Hindi were in addition found.

As mentioned above, Portuguese had given great influence upon social life of indigenous people in Flores, Larantuka and Timor Timur. This analysis was, however, limited only to Indonesian language. Portuguese names, until today, can easily be found as the family names of indigenous people living for a long term in Nusa Tenggara, especially in Larantuka (Fernandez, 2014). History recorded once that the contact between Portuguese and Indonesian natives was found. As their arrival for the first time was in Malacca (Sumatera), there were several words borrowed from Portuguese in Malay as well which are still uttered in Sumatera. Meanwhile, those loanwords are less compared to loanwords in the local languages spoken natively in the eastern parts of Indonesia, especially Flores and Timor Timur or East Timor.

After Portuguese was defeated by Dutch in the 15th century, they immigrated to East Indonesia and built new community in Flores and East Timor (Fernandez, 1998). Hence, the hypothesis is that, there would presumably be effect of Portuguese on Indonesian and languages in East Indonesia since, based on the theory stated by Crowley & Bowern (2010), the interaction between two different cultures, indigenous people in East Indonesia and Portuguese in this case, could have its impact. As the colonizer,

Portuguese should properly understand what these people said in order to survive and to benefit much from them as the locals.

Furthermore, German had contributed in giving great influence on the name of the country, although Indonesia has never been under the control of German directly. The name "Indonesia" itself was introduced by a German, Adolf Bastian, in the 19th century (Seemann, 2000). In addition, German nation, which once came to Indonesia along with Dutch, had effect on the science development (Seemann, 2000). Dutch, in contrast, had great influence of vocabulary diversity, such as *advokat* 'lawyer', *amnesti* 'amnesty', *apotek* 'pharmacy', etc.

METHOD

As this study aims at providing historical Indo-European language traces in Indonesian, I was encouraged to use comparative method for the reconstruction of linguistic forms, referring to both lexical and grammatical. Consequently, two procedures should be employed in this examination, e.g. (1) reconstructing the form of each loanwords diachronically according to Mallory & Adams (2006) and (2) identifying their borrowing process as stated by Campbell (1998). Another method was used to differentiate loan type as the research object which was argued by Swe (2013).

RESULTS AND DISCUSSION
Results

The result led me to come up with the fact that Indo-European languages affected loanwords in Indonesian as the after-effect of language contact. Indo-European languages, e.g. Dutch, English, Portuguese, German, and Sanskrit are influential on Indonesian language. Loanwords, furthermore, include (1) direct loan is borrowing both phonetic form and semantic content, (2) loanshift or semantic loan is borrowing word from the donor language by shifting the meaning of the original word, (3) loan translation or calque is borrowing word from the donor language while translating it directly element by element, (4) loan creation is borrowing the word by creating the new form to translate the foreign concept and (5) loanblend or hybrid is borrowing word by translating one element and retaining the form of other element of the donor language (Swe, 2013). Thus, I managed to provide detailed explanation of each loanwords found in Indonesian along with their reconstruction in this part.

At least three points are categorized as the result of this analysis. The first one related to new language emerging as the contact of the speakers of two languages. That new language aforementioned referred to *Petjuk* or *Petjoh* as the after-effect of contact between Dutch and Indonesian natives. *Petjuk*, however, is recently no longer spoken as its speakers who were Dutch-Indonesian half-blood, got less day by day. It was used to be spoken among Dutch-Indonesian society living in Java Island. Although Dutch supplied more vocabulary, *Petjuk* grammar was linguistically based on Indonesian. This is in accordance with what Holmes (1992) mentioned before. It was clearly stated that the prestige language tends to supply more vocabulary, while vernacular languages have more influence on the grammar. Prestige language in this case referred to Dutch, whereas Indonesian took the role as vernacular language throughout the archipelago. The record of its grammar rules, in contrast, remained kept up to these days.

The second influence of Indo-European languages could be seen on the use of Portuguese family names, including Fernandez, Mendes, etc. by indigenous people residing especially in East Indonesia. The last detail of this influence correlated with loanwords. Indonesian borrowed vocabulary from other languages both by language contact and luxury loan. These loanwords are foremost derived from Indo-European languages, e.g. (1) Indo-Iranian, (2) Germanic, (3) Italic and (4) Hellenic languages. Both Indo-Iranian and Germanic contributed in loanwords as the after-effect of language contact during colonization, while Italic and Hellenic were adopted for luxury loan and the need Indonesian natives acquire to refer to new terms which couldn't be accommodated by Indonesian itself.

Discussion
The Existence of Petjuk Language

Petjuk or *Petjoh* emerged as the combination of Dutch and Indonesian local languages, e.g. Sundanese, Javanese, Batavian-Malay and Bazaar-Malay, and Indonesian as well, as the after-effect of language contact between Dutch and Indonesian natives (Purwitasari, *in press*). Paasman (1994) mentioned these following rules in order to upgrade the status of *Petjuk* itself. This effort, however, was useless as *Petjuk* or *Petjoh* is currently no longer spoken that led it to be extinct.

Table 1. Diffusion of Vocabulary in *Pecuk*

Word Category	Malay	Dutch
1. noun	37 out of 100 words	63 out of 100 words
2. verb	10 out of 100 words	90 out of 100 words
3. question word	23 out of 100 words	77 out of 100 words
4. pronoun	5 out of 100 words	95 out of 100 words
5. possessive pronoun	40 out of 100 words	60 out of 100 words
6. demonstrative	53 out of 100 words	47 out of 100 words
7. possessive conjunction	95 out of 100 words	5 out of 100 words
8. adjective	50 out of 100 words	50 out of 100 words
9. preposition	1 out of 100 words	99 out of 100 words
10. numeral	5 out of 100 words	95 out of 100 words
11. conjunction	5 out of 100 words	95 out of 100 words
12. article	-	100 out of 100 words
13. greeting word	95 out of 100 words	5 out of 100 words
14. interjection	99 out of 100 words	1 out of 100 words

The table aforementioned clearly showed that more words had Dutch vocabulary as their root, amounting to 60,76%, while circa 39,24% based on Malay. Paasman then in the same reference noticed the phonetic system of *Petjuk*, as written below.

Table 2. Shift of Consonant Pronunciation

Dutch	*Petjuk/Petjoh*	Example
z	s	***zeg*** [seg] 'say'; ***zwart*** [swart] 'black'
v	f	***vreemd*** [freem] 'foreign'; ***over*** [ofer] 'over'
v/f	p	***verlop*** [perlop] 'expire'
h	g/ch	***huis*** [chuis] 'house'; ***hem*** [chem] 'him'; 'it'
g/ch	h	***tegen*** [tehen] 'against'; 'at'; 'to'; ***vergeten*** [verheten] 'to forget'
j	ij	***ja*** [ijo] 'yes'

Natives of *Petjuk* eliminated some sounds to balance them, as written in the table.

Table 3. Shift of Consonant Combination

Dutch	*Petjuk/Petjoh*	Example
schr	sr	***schrik*** [srik] 'scare'
nk	ng	***denk*** [deng] 'to think'
e(schwa)	-	***luisteren*** [leist'ren] 'to listen'
-	e(schwa)	***straks*** [sêtêraks] 'soon'
-	d/t	***er in*** [d'rin] 'in it'; ***is er*** [ister] 'is there'
t	-	***vent*** [fen] 'fellow'

In addition, all vowels in *Petjuk* were changed into nasal, as found in this table.

Table 4. Sound Change in *Petjuk*

Dutch	*Petjuk/Petjoh*	Example
a	aa	***man*** [maan] 'man'
oo	o	***dood*** [dhó] 'dead'
uu	ie	***natuurlijk*** [natierlijk] 'naturally'
u	i	***stuk*** [stik] 'part'; 'piece'
e	aa	***geweldig*** [haaweldih] 'awesome'

Herewith I inserted several words in *Petjuk* as sample to determine what kind of borrowing process those words originated.

Table 5. *Petjuk* Vocabulary

Petjuk Vocabulary	Origin	Loan Type
haoes [haaus] 'thirsty'	Indonesian	direct loan (no change found, both phonology and semantic aspect)
api [api] 'fire'	Indonesian	direct loan (no change found, both phonology and semantic aspect)
anstiel [aansi:l] 'painful'	Dutch	direct loan (no change found, both phonology and semantic aspect)
asal [asal] 'origin'	Indonesian	direct loan (no change found, both phonology and semantic aspect)
beterder [baaaadaar] 'better'	Dutch	direct loan (no change found, both phonology and semantic aspect)
bevloering [baaplurin] 'floor'	Dutch	direct loan (no change found, both phonology and semantic aspect)
bevolking [baapolkiŋ] 'population'	Dutch	direct loan (no change found, both phonology and semantic aspect)
bibir [bibir] 'lip'	Indonesian	direct loan (no change found, both phonology and semantic aspect)
bloes [bluus] 'blouse'	Dutch	loan creating (a change found in the form of this word, e.g. ***blouse*** in Dutch borrowed by *Petjuk* by changing it into ***bloes*** which showed the elimination of [e] at the end)

(Cress, 1998)

Portuguese-Rooted Family Names

Until these days, Portuguese names can easily be found as the family name of indigenous people residing in Nusa Tenggara, especially in Larantuka (Fernandez, 2014). According to the history, there was a contact between Portuguese and Indonesian locals. From the 1560s Portuguese settled on the small Island of Solor. Then, they left Solor for Larantuka briefly before 1600. When the Dutch East India Company conquered Solor in 1613, the Portuguese community moved as well to Larantuka on Flores. In 1661 the Dutch brought Portuguese speaking people to Batavia as their slave. From this time onwards, Portuguese settlement named Kampung Tugu in North Jakarta arose (Hidayat & Rahman, 2022). These names mentioned above refer to (1) Fernandez, (2) Soares, (3) da Costa, (4) Michiels, (5) Mendes, (6) Rodrigues, (7) Alvares and (8) Lopes.

Indo-Iranian Loans

Evidences found led to the discovery of Indo-Iranian or Indo-Aryan vocabulary in Indonesian. These included Sanskrit, Pali and Hindi as Indic languages and Persian as the only one Iranian language giving influence on Indonesian respectively. The existence of Sanskrit related closely to Hinduism in Indonesia. Thus, Sanskrit maintained its high status which even spread its influence into Sanskrit derived names, including the name of Jayapura city (former: Hollandia) and Jayawijaya Mountains (former: Orange Range). Sanskrit which came to Indonesia as the after-effect of language contact with India (Varma, 2010), in addition, contributed to almost half of Old Javanese vocabulary, with no more than 25.500 words, used daily, according to dictionary of Old Javanese-Sanskrit written by Zoetmulder in 1982. Consequently, loanwords derived from Sanskrit covered many aspects, e.g. religion, art and daily life. These are some Sanskrit loans found in Indonesian.

Table 6. Sanskrit Loans in Indonesian

Indonesian Word	Meaning	Sanskrit Word	Meaning	Loan Type
acara	'event', 'item in a program'	आचार (*ācāra*)	'custom', 'practice', 'behaviour'	loanshift (borrowing along with shifting the meaning of the original word)
agama	'religion'	आगम (*āgama*)	'traditional doctrine', 'sacred teaching'	loanshift (borrowing along with shifting the meaning of the original word)
aksara	'letter'	अक्षर (*aksara*)	'letter'	direct loan (no change found, both phonology and semantic aspect)
bahagia	'blissful', 'happy', 'lucky', 'blessed'	भाग्य (*bhāgya*)	'good fortune', 'luck', 'happiness'	direct loan (no change found, both phonology and semantic aspect, although it is a noun in source meaning)
bahu	'shoulder'	बाहु (*bāhu*)	'arm'	loanshift (borrowing along with shifting the meaning of the original word)
bangsa	'nation', 'race'	वंश (*vaṃśa*)	'lineage', 'dynasty'	loanshift (borrowing along with shifting the meaning of the original word)
bendahara	'treasurer'	भाण्डार (*bhāṇḍāra*)	'store', 'storehouse'	loanshift (borrowing along with shifting the meaning of the original word)
bicara	'speak'	विचार (*vicāra*)	'discussion', 'consideration'	loanshift (borrowing along with shifting the meaning of the original word)
biji	'seed'	बीजं (*bījaṃ*)	'seed'	direct loan (no change found, both phonology and semantic aspect)
canda	'joke'	छन्द (*chanda*)	'pleasing', 'alluring', 'lovely', 'delightful'	loanshift (borrowing along with shifting the meaning of the original word)
cara	'way', 'style', 'customs'	चारी (*cāra*)	'course', 'way'	direct loan (no change found, both phonology and semantic aspect)
cerita	'story'	चरित (*carita*)	'narration', 'story'	direct loan (no change found, both phonology and semantic aspect)
curiga	'suspicious'	छुरिका (*churikā*)	'knife'	loanshift (borrowing along with shifting the meaning of the original word)
dana	'donation', 'fund'	दान (*dāna*)	'donation', 'gift', 'paying back'	direct loan (no change found, both phonology and semantic aspect)

Those loanwords were being analyzed and, as the consequences, it resulted in some details after being reconstructed diachronically, as written below.

acara	'event', 'item in a program'	*ācāra* (VS), *$*ēk^wērē$* (PIE)
agama	'religion'	*āgama* (VS), *$*ēg^wama$* (PIE)
aksara	'letter'	*aksara* (VS), *$*aksara$* (PIE)
bahagia	'blissful', 'happy', 'lucky', 'blessed'	*bhāgya* (VS), *$*b^hēg^wya$* (PIE)
bahu	'shoulder'	*bāhu* (VS), *$*bēǵ^hu$* (PIE)
bangsa	'nation', 'race'	*vaṁśa* (VS), *$*wamḱa$* (PIE)
bendahara	'treasurer'	*bhāṇḍāra* (VS), *$*b^hēndēra$* (PIE)
bicara	'speak'	*vicāra* (VS), *$*wik^wēra$* (PIE)
biji	'seed'	*bījaṃ* (VS), *$*biǵam$* (PIE)
canda	'joke'	*chanda* (VS), *$*kanda$* (PIE)
cara	'way', 'style', 'customs'	*cāra* (VS), *$*k^wara$* (PIE)
cerita	'story'	*carita* (VS), *$*k^warita$* (PIE)
curiga	'suspicious'	*churikā* (VS), *$*kurikē$* (PIE)
dana	'donation', 'fund'	*dāna* (VS), *$*dēna$* (PIE)

Note:

VS = Vedic Sanskrit

PIE = Proto-Indo-European (Mallory & Adams, 2006)

Furthermore, there are phonological correspondences between Sanskrit as the donor language and Indonesian as phoneme substitution, as reflected in these points: 1) Addition of syllable, as in **bhāgya** (Sanskrit) 'good fortune', 'luck', 'happiness' and **bahagia** (Indonesian) 'blissful', 'happy', 'lucky', 'blessed'; 2) **v** in Sanskrit relates to **b** in Indonesian, as in *vicāra* (Sanskrit) 'discussion', 'consideration' and **bicara** (Indonesian) 'speak'; 3) **k** in Sanskrit and **g** in Indonesian, as in *churikā* (Sanskrit) 'knife' and *curiga* (Indonesian) 'suspicious'; 4) **a** in Sanskrit has relation with **ə** in Indonesian, as in *carita* (Sanskrit) 'narration', 'story' and *cerita* (Indonesian) 'story'.

Unlike Sanskrit, Pali is the language vehicle of Buddhism. It was brought by Indian traders to Indonesian archipelago. Sample of loanwords from Pali are presented in the table below.

Table 7. Pali Loans in Indonesian

Indonesian Word	Meaning	Pali Word	Meaning	Loan Type
belanja	'shopping', 'expense'	वलञ्ज (*valañja*)	'that which is spent or secreted'	loanshift (borrowing along with shifting the meaning of the original word)
dana	'allocated money'	धन (*dhana*)	'treasure'	loanshift (borrowing along with shifting the meaning of the original word)
dana	'donation', 'fund'	दान (*dāna*)	'giving', 'liberality', 'offering'	direct loan (no change found, both phonology and semantic aspect, although their meaning aren't literally equal)
duka	'sadness'	दुक्ख (*dukkha*)	'stress', 'suffering', 'pain', 'distress'	direct loan (no change found, both phonology and semantic aspect, although their meanings aren't literally equal)
merana	'sick', 'sadness'	मारण (*māraṇa*)	'killing', 'slaughter', 'murder'	loanshift (borrowing along with shifting the meaning of the original word)
percaya	'believe'	परिचय (*paricaya*)	'familiarity'	loanshift (borrowing along with shifting the meaning of the original word)
raga	'physical body'	राग (*rāga*)	'lust', 'greed'	loanshift (borrowing along with shifting the meaning of the original word)

The reconstruction of loanwords written above is presented below.

belanja	'shopping', 'expense'	*valañja* (Pl), **walaaga* (PIE)
dana	'allocated money'	*dhana* (Pl), **dʰana* (PIE)
dana	'donation', 'fund'	*dāna* (Pl), **dēna* (PIE)
duka	'sadness'	*dukkha* (Pl), **dukkʷa* (PIE)
merana	'sick', 'sadness'	*māraṇa* (Pl), **mērana* (PIE)
percaya	'believe'	*paricaya* (Pl), **parikaya* (PIE)
raga	'physical body'	*rāga* (Pl), **rēga* (PIE)

Note:
Pl = Pali
PIE = Proto-Indo-European (Mallory & Adams, 2006)

There are at least three correspondences between Pali and Indonesian as an adaptation, as follow: (1) **v** in Pali and **b** in Indonesian, as in *valañja* (Pali) 'that which is spent or secreted' and *belanja* (Indonesian) 'shopping', 'expense'; (2) **a** in Pali and **ə** in Indonesian, as in *māraṇa* (Pali) 'killing', 'slaughter', 'murder' and *merana* (Indonesian) 'sick', 'sadness'; (3) Elimination, as in *paricaya* (Pali) 'familiarity' and *per*c*aya* (Indonesian) 'believe'.

Persian traders sailed across the archipelago and settled in Indonesia, similarly. Thus, they had contact with the natives who spoke Indonesian and the locals intended later to adopt some words from Persian. Those words refer to the vocabulary presented below.

Table 8. Persian Loans in Indonesian

Indonesian		Persian		Loan Type
Word	Meaning	Word	Meaning	
anggur	'grape', 'wine'	انگور (*an-gūr*)	'grape', 'wine'	direct loan (no change found, both phonology and semantic aspect)
baju	'shirt'	بازو (*bāzū*)	'arm'	loanshift (borrowing along with shifting the meaning of the original word)
bandar	'port'	بندر (*bandar*)	'port'	direct loan (no change found, both phonology and semantic aspect)
cadar	'veil'	چادر (*chādar*)	'veil'	direct loan (no change found, both phonology and semantic aspect)
dewan	'assembly', 'meeting'	دیوان (*divan*)	'administration'	loanshift (borrowing along with shifting the meaning of the original word)
firdaus	'eden', 'bountiful garden'	فردوس (*firdaus*)	'eden', 'bountiful garden'	direct loan (no change found, both phonology and semantic aspect)
gandum	'wheat'	گندم (*gandum*)	'wheat'	direct loan (no change found, both phonology and semantic aspect)
juang	'battle'	جنگ (*jang*)	'battle'	direct loan (no change found, both phonology and semantic aspect)
kaisar	'emperor'	قیصر (*qeysar*)	'emperor'	direct loan (no change found, both phonology and semantic aspect)
kismis	'raisin'	کشمش (*kishmish*)	'raisin'	direct loan (no change found, both phonology and semantic aspect)

Likely, further explanation on historical reconstruction of these loanwords is presented below (Fortson, 2004).

anggur	'grape', 'wine'	***an-gūr*** (Prs), ****angur*** (PI), ****angʷhur*** (PIE)
baju	'shirt'	***bāzū*** (Prs), ****bezu*** (PI), ****bʰeĝʰu*** (PIE)
bandar	'port'	***bandar*** (Prs), ****bandar*** (PI), ****bʰandʰar*** (PIE)
cadar	'veil'	***chādar*** (Prs), ****chada*** (PI), ****kadʰa*** (PIE)
dewan	'assembly', 'meeting'	***divan*** (Prs), ****divan*** (PI), ****dʰiwan*** (PIE)
firdaus	'eden', 'bountiful garden'	***firdaus*** (Prs), ****eden*** (PI), ****adʰan*** (PIE)
gandum	'wheat'	***gandum*** (Prs), ****gandum*** (PI), ****gʷhandʰum*** (PIE)
juang	'battle'	***jang*** (Prs), ****jang*** (PI), ****gʰang*** (PIE)
kaisar	'emperor'	***qeysar*** (Prs), ****keysar*** (PI), ****kʷaysar*** (PIE)
kismis	'raisin'	***kishmish*** (Prs), ****miš*** (PI), ****mis*** (PIE)

Note:
Prs = Persian
PI = Proto Iranian (including Persian) (Fortson, 2004)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

In order to conform to native sounds and phonetic constraints, these phoneme substitution phenomena in borrowing process from Persian occurred: (1) **z** in Persian relates to **j** in Indonesian, as in *bāzū* (Persian) 'arm' and *baju* (Indonesian) 'shirt'; (2) **v** and **w**, as in *divan* (Persian) 'administration' and *dewan* (Indonesian) 'assembly', 'meeting'; (3) **ɛ** in Persian links with **a** in Indonesian, as in *qeysar* (Persian) 'emperor' and *kaisar* (Indonesian) 'emperor'; (4) Diphthongization, as in *jang* (Persian) 'battle' and *juang* (Indonesian) 'battle'.s

The arrival of Hindi in Indonesia, additionally, had close relationship with Indian traders who settled around the Strait of Malacca. Thus, language contact affected on language diversity, referring to loanwords from Hindi in Indonesian, as written in the following table.

Table 9. Hindi Loans in Indonesian

Indonesian Word	Meaning	Hindi Word	Meaning	Loan Type
acar	'pickles'	अचार (***achaar***)	'pickles'	direct loan (no change found, both phonology and semantic aspect)
bangsal	'ward', 'shed', 'public building'	भनसाल (***bhansāl***)	'storehouse', 'magazine', 'granary'	loanshift (borrowing along with shifting the meaning of the original word)
cacar	'pox'	चेचक (***cecak***)	'pox'	direct loan (no change found, both phonology and semantic aspect)
candu	'opium'	चण्डू (***caṇḍū***)	'opium'	direct loan (no change found, both phonology and semantic aspect)
curi	'steal'	चूरी (***ćūrī***)/ चोरी (***corī***)	'steal'	direct loan (no change found, both phonology and semantic aspect)
cuti	'leave'	छुट्टी (***chuṭṭī***)	'leave'	direct loan (no change found, both phonology and semantic aspect)
ganja	'cannabis'	गांझा (***gāṅjhā***)	'cannabis'	direct loan (no change found, both phonology and semantic aspect)

Evidence found in analyzing Hindi loan historical reconstruction are presented below (Fortson, 2004).

acar	'pickles'	***achaar*** (Hnd), ****athā*** (PIA), ****atĝʰā*** (PIE)
bangsal	'ward', 'shed', 'public building'	from Sanskrit भण्डसाल (***bhaṇḍsāl***) < भण्डसार (***bhaṇḍasāra***) 'storehouse', 'magazine', 'granary'
cacar	'pox'	***cecak*** (Hnd), ****pōks*** (PIA), ****pāks*** (PIE)
candu	'opium'	from Sanskrit चण्ड+उक
curi	'steal'	***ćūrī*** (Hnd), ****ćōrī*** (PIA), ****kʷārī*** (PIE)
cuti	'leave'	***chuṭṭī*** (Hnd), ****ćattī*** (PIA), ****kʷattī*** (PIE)
ganja	'cannabis'	from Sanskrit गृञ्ज+क or गृञ्जनक

Note: Hnd = Hindi
PIA = Proto-Indo-Aryan (including Hindi) (Fortson, 2004)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

Unlikely, there is only one adaptation found in the borrowed words from Hindi in Indonesian, referring to **n** in Hindi and **ŋ** in Indonesian, as in ***bhansāl*** (Hindi) 'storehouse', 'magazine', 'granary' and ***bangsal*** (Indonesian) 'ward', 'shed', 'public building'.

Germanic Loans

Germanic languages in this examination refer to West Germanic languages, especially Dutch, German and English for having long-term contact with the natives during colonization period. This resulted in loanwords as explained below together with their loan type and historical reconstruction.

Table 10. Dutch Loans in Indonesian

Indonesian Word	Meaning	Dutch Word	Meaning	Loan Type
akur	'agreement', 'accord'	***akkoord***	'agreement', 'accord'	direct loan (no change found, both phonology and semantic aspect)
advokat	'lawyer'	***advocaat***	'lawyer'	direct loan (no change found, both phonology and semantic aspect)
afdruk	'print'	***afdrukken***	'print'	direct loan (no change found, both phonology and semantic aspect)
aktual	'current', 'present'	***actueel***	'current', 'present'	direct loan (no change found, both phonology and semantic aspect)
aliansi	'alliance'	***alliantie***	'alliance'	direct loan (no change found, both phonology and semantic aspect)
andil	'contribution', 'part', 'a share', 'stock'	***aandeel***	'contribution', 'part', 'a share', 'stock'	direct loan (no change found, both phonology and semantic aspect)
antik	'antique'	***antiek***	'antique'	direct loan (no change found, both phonology and semantic aspect)
apartemen	'apartment'	***appartement***	'apartment'	direct loan (no change found, both phonology and semantic aspect)
apartheid	'apartheid'	***apartheid***	'separateness', 'separating characteristics', 'apartheid'	direct loan (no change found, both phonology and semantic aspect)
apotek	'pharmacy'	***apotheek***	'pharmacy'	direct loan (no change found, both phonology and semantic aspect)
arbei	'strawberry'	***aardbei***	'strawberry'	direct loan (no change found, both phonology and semantic aspect)
asbak	'ashtray'	***asbak***	'ashtray'	direct loan (no change found, both phonology and semantic aspect)
baskom	'washbasin'	***waskom***	'washbasin'	direct loan (no change found, both phonology and semantic aspect)
baut	'bolt'	***bout***	'bolt'	direct loan (no change found, both phonology and semantic aspect)
bengkel	'workshop'	***winkel***	'shop'	loanshift (borrowing along with shifting the meaning of the original word)

Loanwords derived from Dutch are foremost found in Indonesian as the result of long-standing contact during Dutch colonization which lasted about 350 years throughout the archipelago. Those borrowed words had been examined and resulted in this following explanation.

akur	'agreement', 'accord'	from French, Vulgar Latin **accordo*, *accordare* 'to be heart to heart with' formed from *ad* + *cor* 'heart'
advokat	'lawyer'	***advocaat*** (Dtc), ****adfōcat*** (PGmc), ****adʰpōgad*** (PIE)
afdruk	'print'	***afdrukken*** (Dtc), ****drücken*** (PGmc), ****dʰrūĝen*** (PIE)
aktual	'current', 'present'	***actueel*** (Dtc), ****actuēl*** (PGmc), ****agtuēl*** (PIE)
aliansi	'alliance'	***alliantie*** (Dtc), ****allians*** (PGmc), ****allians*** (PIE)
andil	'contribution', 'part', 'a share', 'stock'	***aandeel*** (Dtc), ****bidrāg*** (PGmc), ****bidʰrōgʰ*** (PIE)
antik	'antique'	***antiek*** (Dtc), ****antic*** (PGmc), ****antig*** (PIE)
apartemen	'apartment'	***appartement*** (Dtc), ****apartement*** (PGmc), ****abardemænt*** (PIE)
apartheid	'apartheid'	from Afrikaans ***apartheid*** 'apartheid'
apotek	'pharmacy'	***apotheek*** (Dtc), ****apotec*** (PGmc), ****abodeg*** (PIE)
arbei	'strawberry'	***aardbei*** (Dtc), ****ardbēr*** (PGmc), ****ardʰbēr*** (PIE)
asbak	'ashtray'	***asbak*** (Dtc), ****askbeg*** (PGmc), ****asĝbʰegʰ*** (PIE) (combination of *as* 'ash' + *bak* 'container')
baskom	'washbasin'	***waskom*** (Dtc), ****wasbeken*** (PGmc), ****gʷhasbʰeĝen*** (PIE) (combination of *was* 'wash' + *kom* 'bowl'/'basin')
baut	'bolt'	***bout*** (Dtc), ****bolt*** (PGmc), ****bʰolt*** (PIE)
bengkel	'workshop'	from Middle Dutch ***winkel*** 'corner'

Note:
Dtc = Dutch
PGmc = Proto-Germanic (including Dutch, German and English)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

Phoneme substitution existed in borrowing process from Dutch referred to these sound correspondences: (1) **w** in Dutch and **b** in Indonesian, as in *waskom* (Dutch) 'washbasin' and *baskom* (Indonesian) 'washbasin'; (2) **i** in Dutch relates to **ɛ** in Indonesian, as in *winkel* (Dutch) 'shop' and *bengkel* (Indonesian) 'workshop'; (3) Consonant cluster **nk** in Dutch and **ŋk** in Indonesian, as in as in *winkel* (Dutch) 'shop' and *bengkel* (Indonesian) 'workshop'.

Similarly, German had contributed in giving great influence on the name of the country, although Indonesia has never been under the control of German directly. The name "Indonesia" itself was spread widely by a German, Adolf Bastian, in the 19th century (Seemann, 2000). In addition, German nation, which once came to Indonesia along with Dutch, influenced the science development (Seemann, 2000). Thus, German loans can also be seen in Indonesian respectively, although less compared to Dutch. Some of them are stated in the following table.

Table 11. German Loans in Indonesian

Indonesian		German		Loan Type
Word	Meaning	Word	Meaning	
abnormal	'abnormal'	*abnormal*	'abnormal'	direct loan (no change found, both phonology and semantic aspect)
akrobat	'acrobatics'	*Akrobat*	'acrobatics'	direct loan (no change found, both phonology and semantic aspect)
aparatur	'apparatus'	*Apparatur*	'apparatus'	direct loan (no change found, both phonology and semantic aspect)
bioskop	'movie theatre'	*Bioscop*/ *Bioskop*	'movie theatre'	direct loan (no change found, both phonology and semantic aspect)
duet	'duet (musical performance)'	*Duett*	'duet (musical performance)	direct loan (no change found, both phonology and semantic aspect)
empiris	'empirical'	*empirisch*	'empirical'	direct loan (no change found, both phonology and semantic aspect)
erotis	'erotic'	*erotisch*	'erotic'	direct loan (no change found, both phonology and semantic aspect)
estetis	'aesthetic'	*ästetisch*	'aesthetic'	direct loan (no change found, both phonology and semantic aspect)
fonetik	'phonetics'	*Phonetik*	'phonetics'	direct loan (no change found, both phonology and semantic aspect)
halte	'halt', 'stop'	*halten*	'halt', 'stop'	direct loan (no change found, both phonology and semantic aspect)

Although less German loans found in Indonesian, their existence could be traced back using historical reconstruction, as mentioned follow.

abnormal	'abnormal'	*abnormal* (Ger), **abnormal* (PGc), **ab^{h}normal* (PIE)
akrobat	'acrobatics'	*Akrobat* (Ger), **akrobat* (PGc), **aĝrob^{h}at* (PIE)
aparatur	'apparatus'	*Apparatur* (Ger), **apparat* (PGc), **abbarat* (PIE)
bioskop	'movie theatre'	*Bioskop* (Ger), **biogkop* (PGc), **b^{h}iog^{h}ĝob* (PIE)
duet	'duet (musical performance)'	borrowed from Italian
empiris	'empirical'	from Latin *empīricus* and Ancient Greek *empeirikós* (van der Sijs, 2010))
erotis	'erotic'	from French *érotique* and Ancient Greek *erōtikós*
estetis	'aesthetic'	*ästetisch* (Ger), **estetis* (PGc), **esdedis* (PIE)
fonetik	'phonetics'	from Ancient Greek *phōnētikós* which comprises of *phōnéō* + *-tikós*
halte	'halt', 'stop'	from Middle High German *halten* and Old High German *haltan*

Note:
Ger = German
PGc = Proto-Germanic (including Dutch, German and English)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

Only one phoneme substitution found as the after-effect of borrowing process from German which is sound correspondence of ʃ in German and **s** in Indonesian as reflected in *empirisch* (German) and *empiris* (Indonesian) that both mean empirical.

Unlikely, borrowing process of lexicons from English is quite different. English colonization influenced less onto the bonding of English and Indonesian. Instead, English has the higher status which resulted in luxury loan in Indonesian. This is in accordance with the theory of loanwords that languages sometimes borrow words for prestige. Those English loan samples are in the table below.

Table 12. English Loans in Indonesian

Indonesian		English		Loan Type
Word	Meaning	Word	Meaning	
akses	'access'	**access**	'access'	direct loan (no change found, both phonology and semantic aspect)
akting	'acting'	**acting**	'acting'	direct loan (no change found, both phonology and semantic aspect)
aktual	'actual'	**actual**	'actual'	direct loan (no change found, both phonology and semantic aspect)
akuntabel	'accountable'	**accountable**	'accountable'	direct loan (no change found, both phonology and semantic aspect)
botol	'bottle'	**bottle**	'bottle'	direct loan (no change found, both phonology and semantic aspect)
dasbor	'dashboard'	**dashboard**	'dashboard'	direct loan (no change found, both phonology and semantic aspect)
edit	'edit'	**edit**	'edit'	direct loan (no change found, both phonology and semantic aspect)
eksis	'exist'	**exist**	'exist'	direct loan (no change found, both phonology and semantic aspect)
eksperimental	'experimental'	**experimental**	'experimental'	direct loan (no change found, both phonology and semantic aspect)
entri	'entry'	**entry**	'entry'	direct loan (no change found, both phonology and semantic aspect)
fesyen	'fashion'	**fashion**	'fashion'	direct loan (no change found, both phonology and semantic aspect)
gaun	'dress'	**gown**	'dress'	direct loan (no change found, both phonology and semantic aspect)
gosip	'gossip'	**gossip**	'gossip'	direct loan (no change found, both phonology and semantic aspect)
klakson	'horn'	**horn**	'horn'	loan creation (borrowing by creating the new form to translate the foreign concept)
koboi	'cowboy'	**cowboy**	'cowboy'	direct loan (no change found, both phonology and semantic aspect)

Interestingly, English words as the donor language were borrowed and adopted into Indonesian by conforming them to Indonesian sounds and phonetic constraints. Thus, some lexicons are written in Indonesian similarly as how they are pronounced in English, instead of how they are written, as in these words: (1) **accountable** [əˈkaʊntəbəl] (English) and *akuntabel* (Indonesian); (2) **dashboard** [dæʃbɔːd] (English) and *dasbor* (Indonesian); (3) **entry** [entri] (English) and *entri* (Indonesian); (4) **fashion** [fæʃən] (English) and *fesyen* (Indonesian) and (5) **gown** [gaʊn] (English) and *gaun* (Indonesian). Complete reconstruction of those lexicons can be found below.

akses	'access'	**access** (Eng), **gang* (PGc), **gʰang* (PIE)
akting	'acting'	**acting** (Eng), **skaspīl* (PGc), **sĝaspīl* (PIE)
aktual	'actual'	to replace Dutch *actueel*
akuntabel	'accountable'	**accountable** (Eng), **ferantwordlik* (PGc), **perantgʷhordʰlig* (PIE)
botol	'bottle'	via Malay *botol* 'bottle'
dasbor	'dashboard'	**dashboard** (Eng), **dashboard* (PGc), **dʰaskboardʰ* (PIE)
edit	'edit'	**edit** (Eng), **redigeren* (PGc), **redigʰeren* (PIE)
eksis	'exist'	**exist** (Eng), **eksistere* (PGc), **eĝsistere* (PIE)
eksperimental	'experimental'	to replace Dutch *experimenteel* 'experimental'
entri	'entry'	**entry** (Eng), **intrāg* (PGc), **intrōgʰ* (PIE)
fesyen	'fashion'	via Malay *fesyen* 'fashion'
gaun	'dress'	via Malay *gaun* 'dress'
gosip	'gossip'	**gossip** (Eng), **rātsch* (PGc), **rōtsĝk* (PIE)
klakson	'horn'	from Dutch *claxon* 'horn'
koboi	'cowboy'	**cowboy** (Eng), **coboi* (PGc), **gobʰoy* (PIE)

Note:
Eng = English
PGc = Proto-Germanic (including Dutch, German and English)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

Phoneme substitutions got involved in the borrowing process including these issues: (1) **c** in English and **k** in Indonesian, as in a**c**tual (English) and *a**k**tual* (Indonesian); (2) ʃ in English and **s** in Indonesian, as in da**sh**board (English) and da**s**bor (Indonesian); (3) ə in English and **o** in Indonesian, as in bo**tt**le (English) and *bot**o**l* (Indonesian); (4) ə in English and **a** in Indonesian, as in experiment**a**l (English) and *experiment**a**l* (Indonesian); (5) **x** in English and consonant cluster **ks** in Indonesian, as in e**x**ist (English) and *e**ks**is* (Indonesian); (6) Consonant cluster **cc** in English is realized as **ks** in Indonesian, as in a**cc**ess (English) and *a**ks**es* (Indonesian); (7) Diphthongization, as in g**o**wn (English) and *ga**u**n* (Indonesian).

Italic Loans

Borrowing process from Italic languages occurred as the effect of language contact, referring to Portuguese and Indonesian as mentioned before, and luxury loan as happened to Latin and French.

Table 13. Portuguese Loans in Indonesian

Indonesian Word	Meaning	Portuguese Word	Meaning	Loan Type
akta	'certificate', 'act (law)'	*acta*	'certificate', 'act (law)'	direct loan (no change found, both phonology and semantic aspect)
algojo	'executioner'	*algoz*	'executioner'	direct loan (no change found, both phonology and semantic aspect)
armada	'fleet'	*armada*	'fleet'	direct loan (no change found, both phonology and semantic aspect)
bangku	'chair'	*banco*	'chair'	direct loan (no change found, both phonology and semantic aspect)
bendera	'flag'	*bandeira*	'flag'	direct loan (no change found, both phonology and semantic aspect)
beranda	'veranda'	*varanda*	'veranda'	direct loan (no change found, both phonology and semantic aspect)
biola	'violin'	*viola*	'violin'	direct loan (no change found, both phonology and semantic aspect)
bola	'ball'	*bola*	'ball'	direct loan (no change found, both phonology and semantic aspect)
bolu	'cake'	*bolo*	'cake'	direct loan (no change found, both phonology and semantic aspect)
boneka	'doll'	*boneca*	'doll'	direct loan (no change found, both phonology and semantic aspect)
cerutu	'cigar'	*charuto*	'cigar'	direct loan (no change found, both phonology and semantic aspect)

Analyzing the table above led me to the result that there are some sound correspondences between Portuguese and Indonesian after the borrowing process. Those correspondences indicated these details: (1) Addition, as in *algoz* (Portuguese) and *algojo* (Indonesian) 'executioner'; (2) **o** in Portuguese and **u** in Indonesian, as in *bol**o*** (Portuguese) and *bol**u*** (Indonesian) 'cake'; (3) **v** in Portuguese and **b** in Indonesian, as in ***v**iola* (Portuguese) and ***b**iola* (Indonesian) 'violin'; (4) **a** in Portuguese and ə in Indonesian, as in *v**a**randa* (Portuguese) and *b**e**randa* (Indonesian) 'veranda'; (5) Consonant cluster **nc** in Portuguese and **ŋk** in Indonesian, as in *ba**nc**o* (Portuguese) and *ba**ngk**u* (Indonesian) 'chair'; (6) Monophthongization, as in *band**ei**ra* (Portuguese) and *bend**e**ra* (Indonesian) 'flag'.

The idea of historical reconstruction of these loanwords is presented below.

akta	'certificate', 'act (law)'	from Dutch *akte*
algojo	'executioner'	*algoz* (Pgs), **bouo* (PIt), **bouo* (PIE)
armada	'fleet'	*armada* (Pgs), **armado* (PIt), **armado* (PIE)
bangku	'chair'	from Dutch *bank*
bendera	'flag'	*bandeira* (Pgs), **bandīra* (PIt), **bandīra* (PIE)
beranda	'veranda'	*varanda* (Pgs), **varanda* (PIt), **gʷaranda* (PIE)
biola	'violin'	*viola* (Pgs), **violin* (PIt), **gʷiolin* (PIE)
bola	'ball'	*bola* (Pgs), **pala* (PIt), **pala* (PIE)
bolu	'cake'	*bolo* (Pgs), **tota* (PIt), **tota* (PIE)
boneka	'doll'	*boneca* (Pgs), **neca* (PIt), **neka* (PIE)
cerutu	'cigar'	*charuto* (Pgs), **cigar* (PIt), **kiĝar* (PIE)

Note:
Pgs = Portuguese
PIt = Proto-Italic (including Portuguese, Latin and French)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

Table 14. Latin Loans in Indonesian

Indonesian Word	Meaning	Latin Word	Meaning	Loan Type
almamater	'alma mater'	*alma māter*	'alma mater'	direct loan (no change found, both phonology and semantic aspect)
fakultas	'faculty'	*facultas*	'faculty'	direct loan (no change found, both phonology and semantic aspect)
forum	'forum'	*forum*	'forum'	direct loan (no change found, both phonology and semantic aspect)
humaniora	'humanities'	*hūmāniōra*	'humanities'	direct loan (no change found, both phonology and semantic aspect)
pidato	'speech'	*pedātō*	'speech'	direct loan (no change found, both phonology and semantic aspect)
rektor	'rector'	*rector*	'rector'	direct loan (no change found, both phonology and semantic aspect)
universitas	'university'	*universitas*	'university'	direct loan (no change found, both phonology and semantic aspect)

The result mirrored the fact that Indonesian seemed to borrow lexicons from Latin as the way they were with some sound correspondences as explained below.

almamater	'alma mater'	*alma māter* (Ltn), **alma mater* (PIt), **alma mater* (PIE)
fakultas	'faculty'	from Dutch *faculteit*
forum	'forum'	from Portuguese *forum*
humaniora	'humanities'	from Dutch *hūmāniōra*
pidato	'speech'	from Sanskrit पदार्थ (*padārtha*)
rektor	'rector'	via Dutch *rector*
universitas	'university'	from Dutch *universiteit*

Note:
Ltn = Latin
PIt = Proto-Italic (including Portuguese, Latin and French)
PIE = Proto-Indo-European (Mallory & Adams, 2006)

There are at least two conclusions stated in the table above, including (1) Latin loans in Indonesian are lexicons derived from Germanic and Aryan languages, e.g. Dutch, Portuguese and Sanskrit, whose natives came into contact with Indonesian indigenous people long time ago and (2) Latin loans are used to name new concept in Indonesian, such as *almamater* which until these days has no equal term in Indonesian. In addition, at least two sound correspondences found, referring to (1) **c** in Latin and **k** in Indonesian, as in *rector* (Latin) and *rektor* (Indonesian) 'rector' and (2) **ɛ** in Latin and **i** in Indonesian, as in *pedātō* (Latin) and *pidato* (Indonesian) 'speech'.

Table 15. French Loans in Indonesian

Indonesian Word	Meaning	French Word	Meaning	Loan Type
akur	'agree', 'get along well'	*accord*	'agree', 'get along well'	direct loan (no change found, both phonology and semantic aspect)
angket	'inquiry'	*enquête*	'inquiry'	direct loan (no change found, both phonology and semantic aspect)
atase	'attaché'	*attaché*	'attaché'	direct loan (no change found, both phonology and semantic aspect)
domisili	'domicile'	*domicile*	'domicile'	direct loan (no change found, both phonology and semantic aspect)
entrepreneur	'entrepreneur'	*entrepreneur*	'entrepreneur'	direct loan (no change found, both phonology and semantic aspect)
kado	'gift'	*cadeu*	'gift'	direct loan (no change found, both phonology and semantic aspect)
kampanye	'campaign'	*campagne*	'campaign'	direct loan (no change found, both phonology and semantic aspect)
libur	'free (from activities)'	*libre*	'free (from activities)'	direct loan (no change found, both phonology and semantic aspect)
manuver	'maneuver'	*manœuvre*	'maneuver'	direct loan (no change found, both phonology and semantic aspect)
mayones	'mayonnaise'	*mayonnaise*	'mayonnaise'	direct loan (no change found, both phonology and semantic aspect)
sopir	'driver'	*chauffeur*	'driver'	direct loan (no change found, both phonology and semantic aspect)

Similarly, adaptation in order to conform to natives sound also occurred in reconstructing each loanwords derived from French, namely (1) **ch** in French relates to **s** in Indonesian, as in *attaché* (French) and *atase* (Indonesian) attaché; (2) **c** in French and **k** in Indonesian, as in *cadeu* (French) and *kado* (Indonesian) 'gift'; (3) Diphthongization, as in *chauffeur* (French) and *sopir* (Indonesian) 'driver'.

Those French loans were reconstructed as follow.

akur	'agree', 'get along well'	via Dutch *akkoord*
angket	'inquiry'	via Dutch *enquête*
atase	'attaché'	via Dutch *attaché*
domisili	'domicile'	*domicile* (Fr), **domicilio* (PIt), **dʰomikilio* (PIE)
entrepreneur	'entrepreneur'	via English *entrepreneur*
kado	'gift'	via Dutch *kado*/*cadeu* 'gift'
kampanye	'campaign'	via Dutch *campagne* 'campaign'
libur	'free (from activities)'	*libre* (Fr), **libre* (PIt), **libre* (PIE)
manuver	'maneuver'	via Dutch *manoeuvre* 'maneuver'
mayones	'mayonnaise'	*mayonnaise* (Fr), **maionese* (PIt), **mayonese* (PIE)
sopir	'driver'	via Dutch *chauffeur* 'driver'

Note:

Fr = French

PIt = Proto-Italic (including Portuguese, Latin and French)

PIE = Proto-Indo-European (Mallory & Adams, 2006)

Likely, the table showed respectively that French vocabulary borrowed are Dutch loans in French itself. Thus, Dutch influenced indirectly on Indonesian lexicon diversity through French, while French loans met the need of translating new concepts in Indonesian through luxury loan which only occurred in several French-rooted Indonesian lexicons. In other words, Dutch dominance during colonization in the past are clearly seen compared to French that never had any deep relation with Indonesian.

Hellenic Loans

This case reflects another luxury loan in Indonesian which existed for need and prestige. It seems that Greek covered new concept to represent new item Indonesian natives acquired as Greek loans which were found, linked closely with new term. In the following table are written only some lexicons mentioned before.

Table 16. Greek Loans in Indonesian

Indonesian Word	Meaning	Greek Word	Meaning	Loan Type
autopsi/*otopsi*	'autopsy'	αὐτοψῐ̆ᾱ (*autopsíā*)	'seeing with one's own eye'	loanshift (borrowing along with shifting the meaning of the original word)
demokrasi	'democracy'	δημοκρατία (*dēmokratía*)	'democracy'	direct loan (no change found, both phonology and semantic aspect)
filsafat	'philosophy'	φιλοσοφία (*philasophia*)	'philosophy'	direct loan (no change found, both phonology and semantic aspect)
hipokrit	'hypocrite'	ὕποκρῐτής (*hupokritḗs*)	'interpreter', 'actor'	loanshift (borrowing along with shifting the meaning of the original word)
mitos	'myth'	μῦθος (*mythos*)	'word', 'speech', 'conversation', 'tale', 'story', 'narrative'	loanshift (borrowing along with shifting the meaning of the original word)
stadion	'stadium'	στάδιον (*stadion*)	'600-foot'	loanshift (borrowing along with shifting the meaning of the original word)
teater	'theatre'	θέᾱτρον (*théātron*)	'theatre', 'play'	direct loan (no change found, both phonology and semantic aspect)

From the explanation above, it could clearly be concluded that only one pattern existed after the borrowing process, e.g. elimination of the last sound in each lexicon, as in ***autopsíā*** (Greek) and ***autopsi*** (Indonesian) 'autopsy'. The following description is on historical reconstruction of each lexicon found in this examination.

autopsi	'autopsy'	from Dutch ***autopsie*** 'autopsy' is based on Neo-Latin ***autopsia*** 'autopsy'
demokrasi	'democracy'	via Dutch ***democratie***
filsafat	'philosophy'	via Arabic فَلْسَفَة ***falsafa*** 'philosophy'
hipokrit	'hypocrite'	via Latin ***hypocrita***
mitos	'myth'	via Portuguese ***mitos*** 'myth'
stadion	'stadium'	via Dutch ***stadion*** 'stadium' and Greek στάδιο (***stadio***) 'stadium', ***stadio*** (Grk.), ****stadio*** (PIE)
teater	'theatre'	via Dutch ***theater*** which is based on Old French ***theatre*** and Latin ***theatrum*** 'theatre'

Note:
Grk = Greek
PIE = Proto-Indo-European (Mallory & Adams, 2006)

Surprisingly, Greek loans were borrowed via Dutch and Portuguese as the nations which had long-lasting contact with Indonesian natives in the past. This encouraged the theory that language borrowing process occurred between speakers of at least two distinctive languages.

CONCLUSION

Evidence found supported that Indo-European languages contributed to diversity of Indonesian vocabulary, in term of loanwords, family names and new language. As the beginning, the influence of Indo-European languages on Indonesian was new language, which is currently no longer spoken, called *Petjuk* or *Petjoh* was the product of diffusion between Dutch and Indonesian in which Dutch supplied more vocabulary for taking the higher status politically. The second ones referred to Portuguese-rooted family names. These names, in addition, is another prove which encouraged the existence of European nations in this archipelago, especially in East Indonesia.

The most complex issue of the contribution of Indo-European languages on Indonesian, in contrast, is linked with loanwords that are derived from at least four subgroups of Indo-European

languages, including (1) Indo-Iranian or Indo-Aryan, (2) Indo-Germanic or simply called Germanic, (3) Italic and (4) Hellenic. The languages engaged in donor languages of loanwords in Indonesian are Sanskrit, Pali, Persian and Hindi as Indo-Iranian, Dutch, German and English as Germanic, Portuguese, Latin and French from Italic subgroups and Greek as the only one Hellenic. Germanic and Indo-Iranian, furthermore, influenced at foremost in term of loanwords as the after-effect of their long-lasting existence in the archipelago, while Italic and Hellenic supplied less. The loan types found in this research are direct loan and loanshifting for having the shifting meaning in the target language, while phoneme substitution occurred after the borrowing process in order to conform to Indonesian sound. Hence, other upcoming studies on the same topic are respectively encouraged to complete examination on loanwords in Indonesian.

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