

ELABORATION OF THE TECHNICAL LEXICON OF PILIPINO: A SUGGESTED PROCEDURE*

Alfonso O. Santiago
Philippine Normal College

In 1974, when Pilipino was officially prescribed as one of the two principal media of instruction in Philippine schools (vide Department of Education and Culture Order No. 25, s. 1974), one of the serious problems that expectedly came up was the lack of technical terms in the language. It became obvious then that Pilipino would have to be intellectualized if it was to be a language capable of expressing the scientific and technological thinking of Filipinos in the modern world. A major component of such intellectualization is the development of the lexicon, especially in the spheres of science and technology.

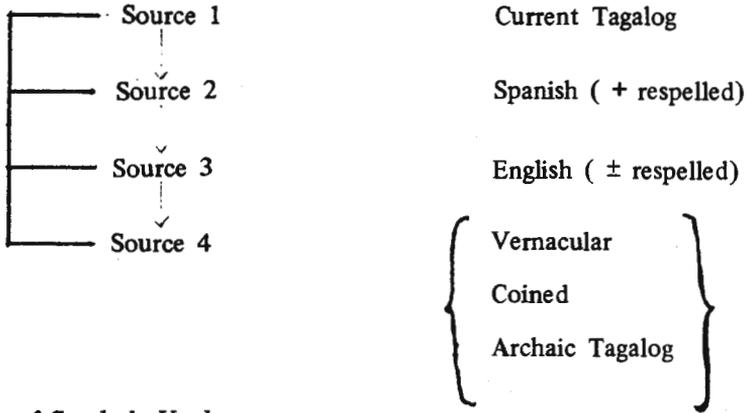
The following are major possibilities or techniques that can be availed of in the elaboration of a Pilipino scientific lexicon:

1. Borrowing from English in the following ways:
 - a. No change in spelling of the borrowed term; e.g. *chemistry*.
 - b. Borrowed term respelled to conform to the Abakada; e.g. *kemistri*.
2. Borrowing via Spanish in the following ways:
 - a. The Spanish equivalent of the English term is taken with no change in spelling; e.g. *quimica*.
 - b. The Spanish equivalent of the English term is taken and respelled to conform to the Abakada; e.g. *kimika*.
3. Borrowing from the Philippine vernaculars, e.g. *butod* for *nucleus*, a Visayan word borrowed by the *Lupon sa Agham* of the National Science Development Board.
4. Retrieving of archaic Tagalog terms from disuse, e.g. *siha*, meaning angle, as retrieved by the *Lupon*.
5. Coining or deriving, e.g. *kapnayan*, meaning *chemistry*, derived by the *Lupon* from *sangkap* and *hanayan*.

Based on a survey the author conducted to determine preferences on lexical elaboration of 300 respondents coming from different fields (see Santiago 1979), a

procedure in prioritizing the elaboration possibilities enumerated above has been developed. The procedure is as follows:

English Technical Term:



Meaning of Symbols Used:

↓ = If not feasible, go to next source.

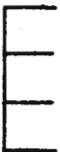
± = May be borrowed with or without spelling alteration.

+

= May be respelled to conform to the Abakada.



= Use whichever is the more adaptable of the three enclosed possibilities.



= Any of the possibilities may be mixed if necessary.

Let us interpret the above lexical elaboration procedure.

Source 1 – Current Tagalog

Faced with an English technical term, use the equivalent term, if available, from current Tagalog.

Examples: recrudescence = *binat*; instead of rekrudesens, recrudescence, recrudescencia, or rekrudesensya

precipitation = *pamumuo*; instead of presipiteysyon, precipitation, precipitacion, or presipitasyon

Note that the term 'Current Tagalog' in this paper carries a rather restricted meaning as it refers only to words which are inherently indigenous and do not have

traces of foreign markedness. Spanish and English words, whether or not they are already part of the Tagalog language currency, are being given separate labels for purposes of this paper. The term *medisina*, for example, is actually part of current Tagalog lexicon but it nevertheless has to be classified as a Spanish term to distinguish it from the indigenous Tagalog term *panggagamot*.

Current Tagalog is assigned as the first source for lexical elaboration simply because Tagalog is undeniably the base of Pilipino (or Filipino). Current Tagalog as the first source means that the terms needed may be drawn primarily from it. The other sources are to be resorted to only if there are no available current Tagalog terms. This may appear to be platitudinous and redundant because Pilipino should naturally draw words from its base and, therefore, Current Tagalog should not be included as one of the possible sources for the suggested elaboration procedure. In the Philippine context, however, a statement of this kind holds significance, especially if one considers that a limit to, say, borrowing English words and phrases cannot be definitely fixed, and that borrowing can grow to such proportions as may threaten to overwhelm and eventually de-stabilize Pilipino as a distinct language.

One realizes at this point the wisdom behind the 'authentication' efforts (more popularly labelled as 'puristic tendencies') of our forebears as manifested in their early grammar books and edicts; e.g. *Balarila ng Wikang Pambansa* and Commonwealth Act 184.

Source 2 – Spanish (+ respelled)

If no current Tagalog term is available, go to Source 2 and determine the Spanish equivalent, if any, of the English term. If the Spanish equivalent sounds common, adopt it by respelling it to conform to the Abakada.

Examples:

<i>English</i>	<i>Spanish</i>	<i>Pilipino</i>
microbe	microbio	mikrobyo
carbide	carburo	karburo
voltage	voltaje	boltahe

This tendency of borrowing via Spanish may have a correlation with the longer historical contact that the majority of the Filipinos have had with Spanish as compared with English, a tendency which prevails up to the present obviously because of the 'barrier' imposed by the inconsistent orthography of English. Whinnom (in Hymes 1971:66) refers to this kind of barrier as 'mechanical' – the incompatibility of the two languages in contact in phonological structures and in orthographic system. Note that a system of letter correspondences can easily be established between Spanish and Pilipino in the process of borrowing. The Spanish *c*, for instance, can regularly be given the equivalent letters *k* or *s* in Pilipino, depending on what vowel follows it; e.g. Sp *matematica* becomes Pil *matematika*; Sp *termoelectricidad* becomes Pil *termoelektrisidad*, etc. Hence, when one prefers the Spanish-sounding word, he borrows it but respells it to conform to the Abakada. This can not be done with terms borrowed from English because it is not possible to have a system of letter correspondences between English and Pilipino.

One should bear in mind, however, that respelling a Spanish word to conform to the Abakada should not go beyond common words; in other words, it should not include proper names, as was done, for example, by our early grammarians.

Source 3 – English (\pm respelled)

If neither of Sources 1 and 2 is feasible, adopt the English term. The \pm sign means that English terms may be borrowed with or without spelling alterations. The plus sign, however, is placed above the minus sign to indicate that as much as possible the incoming term be respelled to conform to the Abakada, especially if the original form will still be transparent in the resulting form.

Admittedly, it is in the manner of handling borrowed words from English in the written form – to respell or not to respell – where several language scholars are manifestly at odds. And this problem is brought about by what has been pointed out earlier – the inconsistency of the English spelling system. In fact, there would be no problem had the spelling system of Pilipino been as inconsistent as that of English because any word, be it regularly or irregularly spelled, could easily be borrowed.

But for Pilipino to become inconsistent in its spelling system is not as simple as others might think. It would ramify into several equally complicated and serious problems which only those initiated in language development can be expected to foresee, especially if the present *Pilipino* officially becomes *Filipino* in the future where apparently borrowing will be more liberalized.

The borrower, actually, is torn between two possible decisions:

First, he can respell an incoming English word if he wishes to preserve the consistency of the spelling system of Pilipino. Strict adherence, however, to this alternative may lead to the loss of dynamism in the language, especially if the original form of the English term is no longer transparent from the resulting form. Asmah (1974:233) in describing this problem in Bahasa Malaysia gave the following orthographic renderings of English loanwords which she said proved to be ‘visually repulsive’ to the users:

haiderojan	‘hydrogen’
maikerofilam	‘microfilm’
sepiar	‘sphere’
saikoloji	‘psychology’

Asmah explains that an orthographic rendering of a loanword is visually repulsive to educated Malaysians if it is ‘too far’ from its counterpart in the source language, i.e. if the orthographic representation in Bahasa Malaysia of a borrowed term has a very low degree of similarity with its original spelling in the donor language.

In the Philippines, former INL Director Jose Villa Panganiban called these visually repulsive forms ‘funny looking’. Consider, for example, the following forms which may look ‘funny’ to an educated Filipino: *paynayt* ‘finite’, *landyerey* ‘lingerie’, *kas* ‘cache’.

Rejection or acceptance of the spelling of a certain term, it would seem, is merely a matter of visual conditioning. Generally, educated Filipinos are so exposed or conditioned to the orthographic representation of English terms that they are likely to react negatively to the respelled forms. And rejection usually takes place when the original form is not visually transparent, traceable, or retrievable from the respelled form.

Second, the borrower can get an English term as is, without any spelling alteration, if he believes that easy communication will be achieved, thus promoting dynamism in the language. The borrower, however, should be cautioned that this may lead to the loss of consistency of the spelling system of Pilipino, which eventually can result in the loss of its authenticity, a phenomenon that signals the incipience of creolization.

The term *proton*, for example, poses no borrowing problem since it is spelled phonemically. The term *mathematician*, on the other hand, may be respelled to conform to the Abakada since the original is still transparent or retrievable from its resulting form – *matematisyan*. The term *dioxide*, however, may be borrowed as is, without spelling alteration, since respelling it would result in a rather grotesque form like *dayoksayd*.

Note that it is in this style of borrowing from English that makes the entry of 'foreign' letters into the Abakada inevitable, such that consistency in the spelling system of Pilipino would no longer be strictly observed, specifically in the realm of technical lexicon. This confirms what Gleason (1961:422) says that 'conformity to some other writing system, even at the expense of one-to-one relationship (between the phoneme and the symbol), may sometimes be desirable, especially in areas where bilingualism is common'.

Source 4 – Vernaculars, Coined/Derived, Archaic Tagalog

If none of the preceding procedures is workable, any of the following, whichever is adaptable, may be resorted to:

1. Borrow from any of the vernaculars, preferably from the major ones. The Philippine vernaculars as possible sources of terms have to be shunted to Source 4 in spite of the provision in C.A. 184 to 'use as a source principally the Philippine tongues' and the provision in the 1973 Constitution regarding the 'development and formal adoption of a common national language to be known as *Filipino*' because that was what the survey data suggested. It appears that the above-mentioned statutory and Constitutional provisions may be applicable in a situation where a foreign language, especially that of a former colonial master, does not occupy premier status in the country. Furthermore, it is perhaps in the enrichment of the nontechnical vocabulary of Pilipino that words from the Philippine vernaculars can naturally come in. For a look at the language of advanced countries shows that the lexicon for ordinary discourse of communication, whether oral or written, is vastly different from the lexicon for technical or scientific information – denigratingly called jargon – which is dictated by new discoveries, new processes, new creations.

2. Coin. Where coining is resorted to, acceptability of the coined term may be improved by observing the following: (a) at least one of the constituents must be a full Pilipino word base whose meaning matches that of the English term; the other constituent(s) must give an immediate clue to the meaning that is sought to be conveyed. Examples: gynecology = *dalubsakit-babae*; triangle = *tatsulok*; (b) euphony; i.e., if letter (a) is not observed, the coined term should carry a combination of sounds suggestive of the intended meaning. Examples: sperm = *punlay*; metamorphosis = *banyuhay*. The term *punlay* is accepted obviously because of its euphonious sound; i.e. it is pleasing to the ear and at the same time gives an immediate clue to the intended taboo term in spite of the fact that the way it was coined can not be accepted as ordinary since *punl* and *ay* are not morphemes taken from the stem *punla* and *buhay*, respectively. This kind of coinage is reminiscent of some of the coinages in the English language. The

The procedure suggested in this paper has focused on the elaboration of the technical lexicon of Pilipino. No claim is made therefore that the same procedure can be transferred directly to the elaboration of the nontechnical vocabulary of the language. However, the author strongly believes that another study focusing on the nontechnical vocabulary of Pilipino will result in more or less the same prioritization of sources.

NOTES

*This is a modified version of the procedure in the development of a Pilipino scientific lexicon recommended by the author in his 1979 doctoral dissertation entitled *The Elaboration of a Technical Lexicon of Pilipino*, Ateneo de Manila - Philippine Normal College Consortium for a Ph.D. in Linguistics. The author in his study conducted a survey of preferences on lexical elaboration possibilities in the spheres of medicine, biology, chemistry, physics, and mathematics, involving 100 college students, 100 professors, and 100 practitioners within the Greater Manila Area. The reader is invited to read the dissertation for a more detailed discussion of some points.

REFERENCES

- ASMAH HAJI, OMAR. 1974. "The role of language standardization in the coining of technical terms in Bahasa Malaysia". Paper read at the Second Conference on Asian Languages, Manila, Philippines, December 16-21, 1974.
- GLEASON, H. A. 1961. Introduction to descriptive linguistics. Rev. Ed., New York: Holt, Rinehart & Winston.
- HYMES, DELL. 1972. Pidginization and creolization of languages. Cambridge: University Press.
- MAUGNAYING TALASALITAANG-PANG-AGHAM: INGLES - PILIPINO. 1969. Lupon sa Agham, Pambansang Patnugutan sa Paunalarang Pang-agham (National Science Development Board). Manila: Herran, Ermita.
- OTANES, FE T. 1977. 'Language use and translation preferences'. In Pascasio 1977. *The Filipino bilingual*. Quezon City: Ateneo de Manila University Press.
- PANGANIBAN, JOSE VILLA. 1970. *Isip, wika, damdamin: Thought, language, feeling*. San Juan, Rizal: Limbagang Pilipino.
- PHILIPPINE COMMONWEALTH ACT 184. 1936. "An Act to establish a National Language Institute and define its powers and duties". Manila: Bureau of Printing.
- PHILIPPINE (REPUBLIC OF THE). 1973. *Constitution of the Philippines*. Manila: Bureau of Printing.
- SANTIAGO, ALFONSO O. 1979. *The elaboration of a technical lexicon of Pilipino*. Unpublished dissertation, Ateneo de Manila University-Philippine Normal College Consortium for a Ph.D. in Linguistics.
- SURIAN NG WIKANG PAMBANSA. 1944. *Balarila ng Wikang Pambansa*. Maynila: Kawanihan ng Palimbagan.
- WHINNOM, KEITH. 1956. *Spanish contact vernaculars in the Philippine Islands*. Hong-Kong: Hong Kong University Press.