https://doi.org/10.47393/jshe.v10iSpecial.902

TẠP CHÍ KHOA HỌC XÃ HỘI, NHÂN VĂN VÀ GIÁO DỤC

BEHAINE - TABERD DICTIONARIES AS FOUNDATION OF QUOC NGU'S SPELLING AND WRITING

Le Nam^a, Nguyen Van Hiep^{b*}

Nhận bài: 15 – 04 – 2020 Chấp nhận đăng: 10 – 09 – 2020 http://jshe.ued.udn.vn/

Abstract: The paper describes two dictionaries compiled by Pigneaue de Béhaine and Jean-Louis Taberd as the foundation for the Vietnamese script, shown in the solutions using Latin letters, combined with some diacritics to describe parts of syllables in Vietnamese. The paper also pointed out and analyzed the causes of the success and great contributions of these two dictionaries.

Key words: Pigneaue de Béhaine and Jean-Louis Taberd's dictionaries; Vietnamese script; initial consonant; rhyme; finals; diacritics; Portuguese period.

1. Introduction

Quoc Ngu was first created by Western missionaries, who wished to latinize Asian languages for evangelization. From its conception to early foundations, Quoc Ngu has gone through many changes. "Dictionarium Annamatico - Latinum", written by Jean-Louis Taberd and published in 1838, can be argued as the earliest foundation of Quoc Ngu. Since then, Quoc Ngu's spelling has largely stayed the same. Our discussion consists of the basic foundation that modern Quoc Ngu was built upon from the works of Pigneaue de Béhaine and Taberd, including the "Portuguese period", latter unsuccessful attempts to reform the system that was founded at the end of 18th century, beginning of 19th century.

From 1990 onwards in Vietnam, the two Vietnamese-Latin dictionaries written by Pigneau de Behaine and Taberd have been recognized as the founding principles of modern Quoc Ngu's spelling and writing, along with other contributions as Nom-Quoc Ngu's legacy in pre-modern Vietnamese. But the recognition has not been widespread and official. There is still too little research about the contributions of these two dictionaries. Among them, we should mention the work of Nguyễn (1994, 89-120) or the "Writing and Phonology" section of Quoc Ngu Period XVIII, collected and edited by Doàn (2008, 418-445). Missionary Jean- Louis Taberd, while completing his pivotal dictionary, insisted that he used Pigneau de Behaine's work as a foundation. Many latter researchers, including linguists Doan Vien Thuat and Nguyen Thi Bach Nhan, confirmed this. This is why in certain cases, we collect their names under one title to highlight the close relationships of the two dictionaries, the foundational basis of Pigneau's works and the dictionary that Taberd published (for example, the 2nd section "Behaine- Taberd dictionaries, foundation of modern Quoc Ngu's spelling and writing", below).

2. Behaine - Taberd dictionaries, foundation of modern Quoc Ngu's spelling and writing

2.1. Foundation of modern writing

Many researchers admitted that the appearance of Quoc Ngu in Pigneau de Behaine - Taberd is the foundation of modern-day Quoc Ngu's spelling and writing:

"The An Nam Latin dictionary (1772 - 1773) marked an important period in which Quoc Ngu is founded upon, including the early years of 17th century (1615-1621) to 1651 with the crucial works of de

^a Reseacher in Paris, France

^bInstitute of Linguistics * Corresponding author

Nguyen Van Hiep

Email: nvhiepseoul@gmail.com

Rhodes. According to Pigneau de Béhaine, the ways of writing Quoc Ngu remain largely unchanged" (Béhaine, 1999).

"For Quoc Ngu's script, this is a shift in the change to the phonology system of French, marking an important change in the development of Quoc Ngu. After Béhaine's dictionary, Quoc Ngu has become more complicated... The importance of this dictionary is that it has collected past experiences and formed them into specific sets of rule (...) Taberd's way of writing is not much different compared to modern Quoc Ngu. Twenty-five cases that we noted when discussing Béhaine's dictionary, have been removed from Taberd's. This shows that Taberd has a more straightforward way of handling things, different than de Rhodes who was afraid of changing the works by his predecessors" (Hoàng, 2007, 324 - 325).

Linguist Doan Thien Thuat recognizes the contributions from the two Vietnamese - Latin and Vietnamese - Portogunese dictionaries, especially the Vietnamese - Latin dictionary of Béhaine, claiming that "Quoc Ngu has been more uniformed and preserved to modern days" (Đoàn, 2008, 433).

... but have not been officially recognized

However, the foundation principles of Béhaine-Taberd dictionaries have not met with widespread recognition in the world of researchers, especially for the people that work on modern Vietnamese dictionary. Recently, dictionarist Hoang Phe (with the Vietnamese dictionary that he serves as the main editor and frequently republished), while admitting that modern Quoc Ngu's spelling was stabilized during the middle of the 19th century, refuses to directly credit Béhaine-Taberd dictionaries (3).

"Spelling standards were slowly formed throughout history, in someways spontaneously, according to the ways of spelling in dictionaries, especially ones that were written from the 19th century to date" (P. Hoàng, 1961). Hoang Phe came up with this when Behaine's dictionary had not been approached by Vietnamese linguists. It is important to note that An Nam - Latin dictionary written by Béhaine was only republished recently (Béhaine, 1999). Rewinding back time, to the 1950s, Le Ngoc Tru in his work "Vietnamese spelling dictionary" published in the South did not mention Béhaine - Taberd dictionaries in its references list (1959: vii), probably because there was no way to directly research their dictionaries. Shortly after that, however, he began to praise the works of Béhaine, stating that from the foundation that the Vietnamese - Latin dictionary established, Quoc Ngu became an intricate system of communication that South East Asia acknowledged and desired", according to historian Henri Bernard- Maitre who wrote from the works of missionary de Rhodes, the talented linguist who finished the project, and the determined priest Ba Da Loc who made adjustments" (Lê, 1961, 45).

2.2. Traits of Béhaine- Taberd's spelling and writing system

2.2.1. Background of Béhaine and Taberd dictionaries

a. Béhaine's dictionary

The Dictionarium Anamitico - Latinum (or Vietnamese - Latin dictionary) by Pigneaue de Béhaine, consists of two sections: word search and meaning translation into Vietnamese. The translation section has 662 pages, serving as the main part of the dictionary. This section uses entry as currency and sorts them alphabetically, from a, b, c ... to u, v, x. For each word, the Nom is placed first, followed by Quoc Ngu, and Latin at the end. The dictionary has 5,943 words in total, and can reach 50,000 or more if counting compound nouns and phrases. The word search section has 67 pages, including a Nom to Quoc Ngu translation chart and an instruction to find obscure Nom's words (according to the introduction to Pigneaue de Béhaine dictionary, Han Nom Journal no.3 (20), 1994).

Pigneau de Béhaine, born as Pierre Joesph Georges Pigneau de Béhaine, was born in 1741 at Aisne province, located in the North of France. He is previously known in Vietnam as Ba Da Loc, or Bi Nhu. He left France in 1865 as a missionary of Paris Foreign Missions Society. In 1867 he moved to Ha Tien in the south of Vietnam and managed a seminary in Hon Dat province. When the seminary was no longer safe, he and the rest of the staff moved to Pondichery in India, a concession of France, at the end of 17th century. Around 1772 - 1773, he started to compile the first Vietnamese - Latin dictionary, with the help of other Vietnamese, French, and Spanish.

Prior to 1975 in Vietnam, researchers from both the north and south side of Vietnam came to understand that the handwritten copy of Pigneau de Behaine was burned in a fire in Ca Mau circa 1778 (P. Hoàng, 1961, 18; Lê, 1961, 37). A copy of this handwritten dictionary is currently preserved at Paris Foreign Missions Society, and in 1960 it became a source of information for researchers in the South. At the start of 1980, the Han Nom Research Institute in Ha Noi was awarded a copy of Pigneau de Béhaine's handwritten Vietnamese - Latin dictionary.

b. Vietnamese - Latin dictionary with additional contributions from Taberd

The Vietnamesse - Latin dictionary written by Taberd was first printed in 1838 in a printing house that belonged to J. Marshnam, at Serampore (Bengale, India). The dictionary consits of three parts. The first part has 46 pages that gives an overview of Vietnamese grammar. Part II has 723 pages serving as the main portion, including around 10.000 words in Vietnamese. Part III is the index section with 101 pages regarding Hortus floridus Concincinoe. The last part has 128 pages on how to find Nom's words.

Jean-Louis Taberd was born in 1794 at Saint-Etienne, Loire province in Central France. Taberd was sent by Paris Foreign Missions Society to the south side of Vietnam, and was appointed as an apostolic vicariate in Lai Thieu, Inner Land in 1827. In 1833, when king Minh Menh sent his army to Gia Dinh to defeat Le Van Khoi and ban Catholicity, Taberd moved to Thailand, and then in 1835 to Serampore in East India, which was under control by Denmark.In 1838, with the help of English government in India, George Eden and the Asian Group, the Vietnamese - Latin dictionary was published (4). In his introduction, Taberd claims that his work was based on the handwritten work of Pigneau de Behaine.

Prior to 1954, former chief executive EFEO Louis Mallaret claimed that there was a need to compare the Vietnamese - Latin dictionary published in 1838 and the handwritten work of Pigneau de Behaine in 1772-1773, to evaluate the contribution of each author. In Vietnam, until the beginning of 1990 (which was after a copy of Pigneau de Behaine's work was gifted to Vietnam Academy of Social Sciences), very few people had access to Béhaine's dictionary. In one of the first articles in 1960, researcher Nguyen Khac Kham noted: "Until now it remains impossible to identify which part Béhaine came up with, and which part was written by Taberd" (K. K. Nguyễn, 1993).

Le Ngoc Tru was arguably one of the earliest people who had the chance to compare a copy of Béhaine's handwritten dictionary to the work of Taberd. He noted: "the section that from word "Vong" to "Vồng", was exactly the same, from the style of Quoc Ngu translation, to Nom and has the exact number of words, no less or more" (Lê, 1961, 39). His claim is similar to father A. Launay's, "when compared to the original handwritten work, it is clear that Father Taberd did not change much" (Lous Mallaret 2004 (1948): lxiii). Linguists Nguyen Thi Bach Nhan and Doan Thien Thuat confirmed that the spelling section of Taberd's was largely the same as Pigneau de Behaine's work.

c. Behaine's writting - spelling system and Taberd's push

It is clear that Quoc Ngu was becoming increasingly popular, especially after the second part of 19th century in the South of Vietnam, where France took over. The question is: what was the status of Quoc Ngu and Béhaine's writting - spelling system at the end of the 18th century, beginning of 19th?

Researchers such as Le Ngoc Tru claimed: "the adjusted writing system, before Taberd composed and printed his work in 1838, must have been popularized in the world of missionaries under the leadership of Pigneau de Béhaine, 70 years ago in 1774. "Though it was not composed into a book, this system of Quoc Ngu was applied and spread among missionaries in the Inner Land and Outter Land, or at least applied in the South under the leadership of the bishop" (Lê, 1961, 38-40). One of the notable aspects of this handwritten dictionary was an uniform system of writing-spelling in the book ("Thánh giáo Yếu lý Quốc ngữ" in HanNom and Quoc Ngu Latin, also composed by Pigneau de Béhaine).

Meanwhile, linguist Doan Thien Thuat highlights the importance of Taberd's dictionary, saying that without his work, the writing system would take much longer to become popular... (Taberd dictionary) helped to spread the system. It made Pigneau de Béhaine's system popular and preserved it to current days (Đoàn, 2008, 433) (5).

2.2.2. Comparisions to modern-day spelling system Alphabet

The number of alphabet letters in Béhaine - Taberd dictionaries is the same as the number of letters in a modern alphabet. As for the order of the letters, other than a notable difference being the letter "Y" being placed for "I", the biggest difference when compared to modern dictionaries is the omission of the letter "P" in Béhaine - Taberd dictionaries (many modern dictionaries have added this letter in with other words that originated from foreign countries, but this is considered to be part of the localization process).

Rhyme

a. Tilde of last vowel (~ or ~) is turned to "ng"

This is considered to be a significant shift (this effectively ends the clash between tilde and High-rising broken tone). The removal of tilde may not be to erase the trace of Portuguese in Quoc Ngu, like many assume. Many legacies of the "Portuguese period" remain in the Béhaine - Taberd writing - spelling system (see 1.3.1), and the removal of tilde gave way to a simpler, more streamlined, and convenient system (not being clashed with the High-rising broken tone in the system of six tones of Vietnamese).

b. Comparing rhymes in Pigneau de Behaine's dictionairy and Alexandre de Rhodes's dictionairy (during the Portugese period) to modern day writing - spelling system

Here are three statistical tables by Nguyen Thi Bach Nhan (Thesis "*The transformations of Quoc Ngu's letter from 1620 to 1877*"):

* Vietnamese - Portuguese - Latin dictionary (1651)

final consonant/ off-glide		Without	/p/	/m/	/n/	/t/	/N/			/	k/	/w/		/i/	
vowel nucleus	Letter	Ø	р	m	n	t	nh	ng		с	ch	u	0	i	у
/i/	i y	i y	ip	im	in	it	inh	ing		ic	ich	iu			
/e/	ê e êi â	ê	êp ep	êm em	ên en	êt et	ênh êinh ânh			êc êic	êch âch	êu	êo		
/E/	e a ă ai	e	ep	em	en	et	anh ănh			ec aic	ach ăch	eu	eo		
/oc/	u	ur				urt		ung		urc		ưu		uri	
/Φ/	ø	α	ор	om	on	ot		ong		oc		ou		oi	
/Φ(/	â a ê		âp	âm êm	ân ên	ât êt		âng				âu au	âo	âi êi	ây êy
/ u /	u ou	u	up	um	un	ut		ung	u	uc ou				ui	
/o/	ô ôu ou âu âo	ô	ôp	ôm	ôn	ôt			ວບັ ວບັ âບັ âວັ	ôc âo				ôi	
/□/	o ao au ăo	0	op	om	on	ot			aວ້ aນັ	oc aoc ăoc				oi	

Chart 1. "List of rhymes without prevocalic" (page 63) Vietnamese single vowel in Vietnamese - Portuguese - Latin dictionary

final Wit		Without	Without /p/		/n/	/t/	/N/		/k/		/w/		/	i/	
consonant/			1												
off-glide															
vowel	Letter	Ø	р	m	n	t	nh	ng		с	ch	u	0	i	у
nucleus															
	ia	ia													
	iê		iêp	iêm	iên	iêt		iêng		iêc		iêu	iêo		
/ie/	ie		iep	iem	ien	iet		ieng		iec		ieu			
/10/	yê							yêng				yêu			
	yâ							yâng							
	iâ							iâng		iâc					
/œФ/	ua	ura													
	ươ		ươp	ươm	ươn	uot		ương		uoc		urou		uoi	
/	ưâ			urâm	ưân			ưâng							
	oâ			oâm									oâo		
	ua	ua													
	uô			uôm	uôn	uôt		uông		uôc				uôi	uôy
/uo/	u_ô			u_ôm		u_ôt									
	uo			uom		uot				uoc				uoi	
	u_o uâ					u_ot									
				uâm	uân	uât		uâng		uâc				uâi	uây
	u_â oâ					u_ât									
					oân	oât				oâc					oây
	o(â					o(ât				o(âc					
	uê													uêi	

Chart 2. List of rhymes (without prevocalic) Diphthongs in Vienamese - Portuguese - Latin

Chart 3. List of rhymes (without prevocalic) in Pigneau de Béhaine's Vietnamese - Portuguese - Latin dictionary

final		Without	/p/	/m/	/n/	/t/	/N/			/1	c/	/w/		/i/	
consonant/			1												
off-glide															
vowel	Letter	Ø	р	m	n	t	nh	ng	1	с	ch	u	0	i	У
nucleus															
/i/	i	i	ip	im	in	it	inh				ich	iu			
	у	у													
/e/	ê	ê	êp	êm	ên	êt	ênh					êu			
, 0,	â						ânh				âch				
/E/	е	е	ep	em	en	et							eo		
	a						anh				ach				
	ă										ăch				
/oc/	ư	u				ut		ung		urc		uu		ui	
/Φ/	o	ø	op	om	on	ot		ong		oc		ou		oi	
/Φ(/	â		âp	âm	ân	ât		âng		âc		âu		âi	ây
1	ă		ăp	ăm	ăn	ăt		ăng		ăc		ău			
/ă/	а		_									au			ay
/a/	а	a	ap	am	an	at		ang		ac			ao	ai	
/u/	u	u	up	um	un	ut		ung		uc				ui	
	0	0	op	om	on	ot		ong		oc				oi	
/□/	ao							aong							
	o(o(c					
/o/	ô	ô	ôp	ôm	ôn	ôt		ông		ôc				ôi	
lial	iê		iêp	iêm	iên	iêt		iêng		iêc		iêu			
/ie/	ia	ia													
$ \Phi_{\infty}\rangle$	ươ		ươp	ươm	ươn	ươt		ương		uoc				ươi	
	ua	ua													
/uo/	uô			uôm	uôn	uôt		uông		uôc				uôi	
	ua	ua													

In comparison, we can see that the rhymes in Vietnamese - Latin dictionary (1773) in the above charts are identical to rhymes in modern dictionary (expect for rhymes that are related to the letter "I", see section D). On the opposite hand, there are many differences between the modern writing - spelling system compared to the Vietnamese - Portuguese - Latin (1651).

c. Cases where *rhyme* no longer exists in modern spelling system, but has been replaced with alternatives

+ Éc - > Éch; Lậnh - > Lệnh (or Lịnh); Ngèo -> Nghèo

Trần Nghĩa (1994) noted very few occasions where the old spelling system is reserved: Aóng can be written as Óng (p. 73), Cặch -> Kệch (p. 171) or Mằu -> Màu (p. 352).

In the case of *aong*, Nguyen Thi Bach Nhan's indicates the rhyme /ɔŋ/ appears 475 times, including 451 as *ong* and 24 times as *aong* (taking just 4.85%) (Nguyễn, 1994a, 113 -114). *Ong*, as a new way of spelling, is more relevant in the work of Béhaine.

d. Cases that Beahaine was uncertain of

Nguyen Thi Bach Nhan especially noted that writing au - ău to spell /ăw/ has roughly the same frequency (87 and 62 times out of 149, accounting for 58% and 42%). According to the author, Pigneau de Béhaine kept the spelling ău, which originated from the Vietnamese - Portuguese - Latin dictionary (and has become the traditional way of spelling for over a century), showing that he was indecisive in certain cases of spelling (Nguyễn, 1994a, 111-112).

- The I and Y issue

+ I in "uiê": DUIÊN (Duyên), KHUIÊT (Khuyết).

+ I in "ui": HUINH (Huynh) or HUÌNH (Huỳnh).

+ I in "uia": KHUIA (Khuya).

The letter "I" and "Y" are often used to replace each other from then to now (Cao, 2014). In the Vietnamese - French dictionary, composed by Joesph Simon Theurel and published in 1877, the word HUINH, HUÌNH is placed right after HUYÉT, HUYỆT, HUYỆN (Theurel, 1877, 189).

e. Outdated rhymes

For example, the rhyme "OU" in BOU or MOU, or NGOU no longer exist

2.3. Reasons that led to Béhaine - Taberd's dictionaries success

Building and establishing Quoc Ngu writing spelling system is a product of a long process (at least more than a century) of experiments, testing, and adjustments. The Béhaine - Taber's dictionaries are the almost completed product of this whole process. What led to the success of these dictionaries, especially the dictionary that Pigneau de Béhaine published in India (1772 - 1773), in the time when Vietnam was going through chaos and wars, will certainly be the topic of other researches. One of the biggest questions is: Did this important handwritten dictionary inherit the composing methods of other national dictionaries in Europe that were also in the forming process? Firstly, the four main characteristics that contributed to the success and accepted by Vietnamese linguists are:

2.3.1. Turning points in phonetics

The change in Vietnamese's phonetics made Vietnamese at the end of 19th century sound like the Vietnamese of today.

+ The loss of certain double consonants (bl, ml, tl and classic b).

+ Changes in rhymes: Vietnamese at the end of the 17th, 18th centuries tended to extend when pronouncing and say the consonant with a greater volume in the latter part of the speech. At the end of the 18th century, there is a tendency to pronounce less ang > ăng, ong > $\hat{a}ng$, or $\sigma c > \hat{a}c$ (Đoàn, 2008, 435).

2.3.2. The uniformed spelling system

Doan Thien Thuat emphasized the main progress of changes in spelling through dozens of Quoc Ngu's literature, especially in the case of word **ng** which was used in parallel with tilde to create the consonant /ŋ/. In the case of rhymes that end with **ng**, the role that Pigneau de Béhaine played in using a uniform letter is clear (Đoàn, 2008, 436).

2.3.3. Greater understanding of phonetics

We can say that Pigneau de Béhaine created a Quoc Ngu revolution. This change caused a shift in the Quoc Ngu from a system that was based on phonetics (a way to pronounce that aids foreigners to learn Vietnamese - added by author) to a system that based on phonetic recording (which is built from the inputs of native - added by author) (T. B. N. Nguyễn, 1994b).

"While using Quoc Ngu, its users slowly realized the importance of rhymes that they hear and that reflects in the writing system" (Đoàn, 2008, 435). Perhaps missionaries had asked for a collaboration with the native, as an amateur linguist, to test phonetic solutions. The native with some knowledge about phonetics and spelling has played an important part in choosing a writing - spelling system that suits the community.

The uniformization of writing the diphthong /uo/ is seen as an important shift. This diphthong combines with the off-glide /i/, in Béhaine's dictionary, is written as "uôi", in Vietnamese - Portuguese - Latin (de Rhodes) has 8 ways: uôi, uoi, uêi, uâi, uôy, uây, oây, oêi (Table 19, (Nguyễn, 1994a, 115-116). This is perhaps because the users are becoming increasingly aware of the value of rhymes that they hear, uniforming it, and making it easer to write. We think that this can be the principle behind Pigneau de Béhaine's decision to choose this way of spelling.

2.3.4. The Béhaine - Taberd's dictionaries are not only for Vietnamese - Latin translation but also for Nom

The Béhaine - Taberd's dictionaries are not only for Vietnamese - Latin translation, but also for Nom. Though this dictionary follows the A, B, C order of Europe, characters in Nom are prioritized. The team that contributed to this certainly knows Western Europe and Viet - Han cultures, as their suggestions can affect the whole community, especially the Nho community, which then was considered to be the higher class in Vietnamese society and led to greater acceptance.

We know that alongside the Vietnamese - Latin dictionary (including Nom), Pigneau de Béhaine also left another important handwritten work: the Han - Viet - Latin. The dictionary follows the order of Han character, with the equivalent in Vietnamese (which follows Europe's alphabet order) and explanation in Latin. This is a very rare work, but has not been analyzed by researchers in Vietnam (Béhaine, 1999).

3. Contributions prior to Pigneau de Béhaine: the marks of the "Portugese period"

Quoc Ngu is a writing system that aims towards the recording of language phonetics, based on the separation of words to small bits with different values, called as phonemes. The development of Quoc Ngu script using European character is a long process, with contributions from many, including Vietnamese. Documents show that at the end of the 17th century, Quoc Ngu began to have a more stable outlook, especially with the release of the Vietnamese-Portuguese - Latin dictionary (Dictionarium Annamaticum - Lusitinum et Latinum) by priest Rhodes (1651) in Rome

3.1. Main achievements of the "Portuguese period"

When developing Quoc Ngu to write Vietnamese, a language that has very different phonetics compared to European languages, its contributors use existing Roman characters and also add new characters.

Quoc Ngu "de Rhodes era", or the "Portuguese period" uses many characters in the European alphabet to write Vietnamese.

Consonants: Nguyen Thi Bach Nhan's examination of "Briefings on Annam or Dong Kinh" (Vietnamese -Portuguese- Latin) and "Origins of Vietnamese's alphabet" of A-G. Haudricourt - 1949) shows that the first 31 consonants, other than the letters in Roman first consonants chart (B,C,D,Đ which D with an extra sign, NH), there are letters that originated or are directly from Latin letters (L, M, N, Q, T, V/U), Portuguese letters (CH, GI, NH, X), Spanish (CH, X), Greek (B, H, K, KH, PH, TH), modern Italian (G, GH, NG), Germany (K), self made double consonants (BL, ML, TL)... or borrowed words with different pronunciations (S, TR) (Nguyễn, 1994a, 52-54). The number of consonants, in the documentary "Yearly records sent to priests supervising in Japan and China" of Gaspar de Amiral is almost the same, with only 4 missing (bl, g, gh and ml).

Vowels: A, E, I, O, U are directly taken from the Latin alphabet, with the letter Y coming from Greek. Some vowels with diacritics already exist in European languages (($\hat{a}, \hat{o}, \hat{e}$). Others that did not exist yet such as (σ , u) were inspired from Eastern Roman, with letters such as ü, ö.

Vowels: A, E, I, O, U are directly taken from the Latin alphabet, with the letter Y coming from Greek. Some vowels with diacritics already exist in European languages ((\hat{a} , \hat{o} , \hat{e}). Others that did not exist yet such as (σ , u) were inspired form Eastern Roman, with letters such as ü, ö.

Tones: Using tone marks to signify Vietnamese tones

Tones and rhymes are crucial in understanding Vietnamese and this is a great challenge for foreigners: "The phonemes in European languages are segmental phonemes, linear, allowing researchers to separate them. On the opposite hand, in Vietnamese and other South East Asian languages, the phonemes are featured on a different level, embedded, with a tone as unsegmented phoneme covering all syllables, blurring the line of syllables" (Hoàng T. C., 1989, 111).

Seperating unsegmental tone allows linguists to encode the complicated "rhymes" section (including single vowel/ or diphthong + final consonant/off-glide) along with on-glide. Seperating phonemes, using different diacritic with vowels, building a tone system, seperating tone from rhymes are important achievements of the Portuguese period (Nguyễn, 1994a, 30).

As noted by Alexandre de Rhodes, tone is very important in Vietnamese. "We say that voice is the soul of words in this language, so it is important to pay attention to them. Because of this, we use tone marks from Greek, such as acute, grave, and circumflex for them, because they are not enough [...]. However, all the tones of this language are divided into six categories, so all words of this language belong to one of these six categories, and in reality, there is no exception" (Fernandes & Assunção, 2017, 168) (6).

3.2. Rhymes - a huge obstacle

3.2.1. Challenges

The Quoc Ngu of 17th century of de Rhodes is still very different than the uniformed version of Pigneau de Béhaine in the latter years. The main difference is rhymes-related. Rhymes in Vietnamese, for the most part, are not similiar to ones in European languages. They have complex structures, and missionaries back then could not identify phonemes effectively. This is especially hard because Vietnamese has so many dialects and subdialects that could have changed in this time.

In complicated cases, the spelling solution that was provided before Béhaine - Taberd's dictionaries were scattered. Speaking of this, linguist Hoang Phe was sympathetic: "the rhymes that have changed are complicated ones, structured- wise, and analyzing them is diffifcult. In these cases, the creators of Quoc Ngu was troubled. In modern Quoc Ngu, if not all, rhymes that use similar phonetics still struggle to make sense". (P. Hoàng, 1961, 16-17). The author mentioned how the rhyme ây has 5 ways of writing, other than ây, there is êy (ếy, lếy), êi (ai nếi), âi (đầi tớ) and ei (quéi)... (Vietnamese - Portuguese - Latin dictionary). According to Hoang Phe, possible reasons for this are because the author of the dictionary based their works on previous issued documents, or based it from dialects of different areas, or the author hesitated due to the lack of analyzation of certain syllables.

3.2.2. Limitations

Doan Thien Thuat, in the book "Quoc Ngu script in century XVIII", based on his analyzation of 42 Quoc Ngu books prior to the Béhaine-Taberd's dictionaries, also noted that there are many vowels or rhymes that are described using different spellings. For example, the diphthong /uo/ when combined with different finals lead to 18 different ways of writing (uom, uâm, uôt, uot, uât, oân, oât, oat, uâng, uoc, oâc, uôy, uoi, uâi, uây, oây, uêi). Or the diphthong /ie/ has six ways of spelling (Đoàn, 2008, 426 - 427).

Overall, spelling in the 17th was not uniformed. One of the reasons is hue of vowel in rhyme depends on the last consonant/off-glide. Researching on the changes of modern Vietnamese phonemes, linguist Hoang Thi Chau imagined dozens of complicated changes of Vietnamese's phonenemes in the last 5 centuries, which includes the time when creators of Quoc Ngu were creating a writing system for Vietnamese. Most notable is the complicated relationship in rhymes between vowels and last consonant/off-glide (Hoàng T. C., 1989, 153).

In conclusion, the differences in Vietnamese between regions, alongside the rapid changes of the language in this period, and limitations in understanding rhymes, all led to the lack of an appropriate phonemespelling system for Quoc Ngu during the period prior to Béhaine - Taberd. (see the section "On the marks and other signals in vowels", Vietnamese - Portuguese-Latin dictionary of Rhodes (1651, 10-11))

4. General comments

How Quoc Ngu was completed at the end of the 18th and beginning of the 19th century remains a topic that needs to be uncovered by linguists, phonologists, as well as history researchers. However, two general comments can be made about the Quoc Ngu's language system under Béhaine - Taberd and issues regarding reforming Quoc Ngu.

4.1 The phoneme record system has become a public property.

The Quoc Ngu script is phonetic writing type. This type of script is intended to record the sound of language, based on the segment of speech into the smallest units of distinctive value, called phonemes. However, there is an important note that this letter is understood as the representative of the language it serves, linked to vocabulary and grammar knowledge, and certain phoneme solution of that language, and should not be understood as a pure shorthand of a language (7)/ In reality, the final goal and also the everyday goal of phonetic writing system is to encode and recover meanings that linguists have identified in the form of a graph (only linguists would care about how letter is encoded and reflect a language's phonology structure, while regular users rarely care about this complicated matter). From this view, overall, the Béhaine - Taberd 's dictionaries have accomplished the goal to encode in a uniformed and effective method, aiding in the recovery of communication meanings, and very convenient for its users. The writing and spelling system of Quoc Ngu that the Béhaine - Taberd established and used effectively came at the turn of the 19th century - early 20th, and should there be another time-consuming reform to provide solutions? This was the exact question that was asked at the beginning of the 20th century. The answer is no! Other than a couple of individuals, there is no society group that dare to go on an adventure with the reform of the historical Quoc Ngu (10). The Quoc Ngu system that was completed at the end of the 18th and beginning of the 19th century the product of interaction, a close relationship between European - Vietnamese in a close Catholic environment or multi-cultural Catholic/ Oriental studies/ Nho studies.... has become public property.

The debate seems to be over. However, there is a contradiction: right when the Latin's based Quoc Ngu formed with inputs from the Béhaine - Taberd's dictionaries, finally proved its immovable position in Vietnam's society, there is a proposal to reform it on a major scale (Bui Hien's project) that disturbed society, even causing paranoia in a section of the public. A project is considered to be "impossible" (V. H. Nguyễn, 2017), but forced authorities to raise their voices. Many bring their theories, that if the knowledge about Béhaine and Taberd's valuable works was more widespread, and educated at school, then proposal from Bùi Hiền would only push some discussion in its field and failed to reach its eventual popularity. However, this stir did have several positive notes. As for the history of Quoc Ngu, the value of Nam Hiệp Dương Việt's dictionary by Taberd suddenly became well-known, helping to gain attention from experts to an abandoned field.

4.2. Delusions about reform: The effects of ignoring research on the history of language

Quoc Ngu's script is a fairly scientific phonetics writing system. The people who wanted to reform Quoc Ngu did not understand the basic that this script is the product of hard work over centuries, the product of Western's educated class on a high-class language, accepted firstly by Catholics and later widespread accepted by Vietnamese, using it as a primary communication tool, replacing a writing system that lost its historical position (Han script) and a script that could not become an effective script in the workspace for its nation (Nom script). Many advantages came together to form Quoc Ngu's writing and spelling system formed at the end of the 18th, beginning of the 19th century. From this period onwards, there will be very few minimal changes, adjusting in detail and partially, and this system will not accept any major change.

There is a sad reality that in modern research on languages, especially in the majority of *introduction to linguistics books*, the introduction to writing systems is very underwhelming, mostly appearing in the last few chapters. Perhaps modern-day linguists still pay too much attention to Saussure's instruction: " Language and writing are two distinct systems of signs; the second exists for the sole purpose of representing the first. The linguistic object is not both the written and the spoken forms of words; the spoken forms alone constitute the object" (Saussure, 1959, 23) (8). The science of the history of writing, specifically Quoc Ngu, must be built on strong foundations on research methodology because this is an interdisciplinary research subject, placed at the intersection between *phonetics - phonology* and spelling, but also related to other fields, such as social history, culture, political, social science and psychology, even jurisprudence. A solid methodological foundation will limit the damaging consequences of delusions that forcefully interfere with this delicate matter.

One of the biggest topics related to Quoc Ngu that should be further discussed is spelling standards in cases that are still debatable. On the principle that Quoc Ngu is established and formed upon, there is still a need to research and identify spelling standards: The Y/I issue, capitalizing organizational names, transcription or using original names, issues on the placement of tone marks... Issues like these seem simple but are very important in today's digital era. Along with this real challenging scenario, issues related to theories such as: what is reforming script, what is reforming spelling... need to be uncovered. Understanding Behaine - Taberd dictionaries as foundation of Quoc Ngu's spelling and writing, comparing experiences of countries using Latin's alphabet, as well as phoneme-based writing system, with similar traits to Vietnamese, will bring valuable lessons.

(*) We appreciate the comments that linguist Hoang Dung made throughout writing this. Special thanks to linguist Nguyễn Thị Bạch Nhạn for her comments of the thesis "Quoc Ngu's changes in appearance from 1620 to 1877".

Notes

1. Until the beginning of 1960, linguistic researchers from the North and South part of Vietnam both acknowledge the importance of Pigneau de Béhaine and Jean-Louis Taberd's dictionaries (even though the value of each dictionary needs to be further discussed, since it is impossible to approach the original copy. The original copy of Pigneau de Béhaine's is considered burned, and the only copy is stored at the MEP archive - Paris Foreign Missions Society). However, after the country was united, Pigneau de Béhaine's is no longer mentioned. In 1994, Han Nom Research Institute decided to upload this dictionary, because "this is a precious work, which can help us in researching ancient Vietnamese and Quoc Ngu, especially Nom during XVIII century. Han Nom Journal, since issues 1 (14-1993) published in many issues for its readers. The main section would be published first, followed by the index".

2. Preserving its traditional value: "This Anamitico - Latium's dictionary has an important place and value in the country's culture, especially in researching and understanding Vietnamese, with many ancient words recorded (...) (the notes in Latin is valuable, but rarely used). (...) This dictionary...now near-extinct, has so many Vietnamese words of the past that we can examine and cross-reference. At the same time, what is valuable is that Nom is recorded during that period, because it is valuable in many ways" (Taberd, 2004). Or "The Vietnamese Latin dictionary that Pigneau de Béhaine wrote plays an important part in understanding the history of Vietnam, from phonemes to meanings, from grammars to rhetoric... Pigneau de Béhaine's dictionary, therefore, is a necessary addition to Nom circa XVIII, and after that, the history of Nom in its development from the early days to 1944" (N. Trần, 1984).

3. In actuality, Hoang Phe at the beginning of 1960 saw the huge similarity between Taberd's spelling - writing system and the current system, but he focused more on changes. He said " We say Quoc Ngu from the last century to now has largely remained unchanged, if not exactly the same. This is clear when we compare Quoc Ngu in Taberd's dictionary and some latter dictionaries with the Quoc Ngu that we use today (P. Hoàng, 1961, 19-20). Hoang Phe, in the above article, aslo claimed at that Central Library in Hanoi, there was a copy of Pigneau de Béhaine 's dictionary but later lost, and researchers in the North lost an important document to research Quoc Ngu script in the 18th century. 4. For a greater overview of Taberd's life and the Viet - Latin dictionary, read Louis Malleret 2004 (1948): "Notes about Taberd's dictionary published in Bengale in 1838" in Taberd's dictionary, the article of École française d'Extrême-Orient 's chief executive (1949-1956) was published in Bulletin de la Société des études Indochinoises (Nouvelle série) T. XXIII. N°1 129 - 1948.

5. In reality, as we moved to the second half of the 19th century, based on existing foundations, Quoc Ngu was in a different position, exceeding the limits of the Catholic's community. Vietnamese learning books, as well as books written in Vietnamese by Truong Vinh Ky, as well as Quoc Ngu newspapers in the South (notably Gia Dinh newspaper in 1865) with proper standard and widespread accepted by society. This is a road that led to a writing system slowly accepted by entire Vietnam's society. "His career (Trương Vĩnh Ký) led to a strong foundation for Quoc Ngu during its early days. From then backward, Quoc Ngu only operated within the realm of Catholic groups. For him, the script exceeded a "church script" and entered Vietnam's society... Nguyen Truong To was the person who suggested using "quốc âm Hán tự"; Truong Vinh Ky was the enthusiastic warrior of the new script. With his reputation in education, he required Quoc Ngu to be taught in elementary schools... His influences and Huynh Tinh Cua's helped Quoc Ngu to grow early in Vietnam...." (Thanh, 1967, 32).

6. To translate an extract from Gonçalo Fernandes and Carlos Assunção, we used the translation from Võ Xuân Quế, with minor changes. In recent years, some researches have aimed towards examining Francisco de Pina's contribution during the founding "Portuguese period", with issues regarding tones and using Latin letters for Vietnamese. Behind de Pina was his teacher, bishop João Rodrigues, nicknamed "Tçuzu". "Tçuzu" was the person Rolande Jacques called "a linguist genius" and Charles Ralphe Boxer called "the founding father of Japanese's research" (Fernandes & Assunção, 2017, 173-174).

7. If we only focus on the extreme compatibilities between spelling and writing, we will have International Phonetic Alphabet (IPA) and not a writing system. As for this distinction, Coulmas compared: "Who would claim that a beautiful woman consists of black and white dots just because a picture of her does? In like manner, we must not confuse a segmental *description* of speech with the speech itself. In a sense, alphabetic orthographies can be understood as

descriptions of their respective languages, but in any event the relationship between sequences of alphabetic letters and speech is never a one-to-one mapping relation" (Coulmas, 2003, 113).

8. Evaluating the importance of scripts must be changed, because in today's world, with the rapid development of information technology, with Internet and advanced communication forms such as email, chat... the role of scripts is increasingly becoming important. If in the past, when speaking of communication, the writing system only played a supporting role to sounds, then in today's world, it is impossible to imagine modern society without a proper writing system, with great knowledge being stored online and in libraries (both physical and digital). There are more and more people focusing on the importance of the writing system and types of text, written communication across cultures in business and foreign exchange (Zhu, 2005, 20).

References

- Amaral, G. do. (1632). Tường trình hàng năm gửi cho linh mục dòng Tên, giám sát các tỉnh ở Nhật và Trung Hoa.
- Béhaine, Pigneau de. (1999). Tự vị Annam Latin, 1772-1773 / Dictio-narium anamitico latinum, 1772-1773 (Hồng Nhuệ & K. X. Nguyễn, Trans.). Trẻ.
- Béhaine, Pigneau de. (1773). Vocabularium annamitico latinum. AMEP.
- Béhaine, Pigneaux de. (1773). Dictionnaire sinovietnamien Vietnamien usuel - Latin - chinois. AMEP.
- Bùi, H. (2017). Toàn bộ đề xuất cải tiến phụ âm "Tiếq Việt" của PGS Bùi Hiền. https://zingnews.vn/toanbo-de-xuat-cai-tien-phu-am-tieq-viet-cua-pgs-buihien-post799107.html
- Cao, T. T. (2014). *I và Y trong chính tả tiếng Việt*. Văn hoá Văn nghệ.
- Coulmas, F. (2003). Writing Systems: An Introduction to Their Linguistic Analysis. Cambridge University Press.
- Đỗ, Q. C. (1972). Lịch sử chữ Quốc ngữ 1620-1659. Ra khơi.

- Đoàn, T. T. (2000). Ngữ âm tiếng Việt. Đại học Quốc gia Hà Nội.
- Đoàn, T. T. (2008). Chữ Quốc ngữ thế kỷ XVIII. Giáo dục.
- Fernandes, G., & Assunção, C. (2017). First codification of Viet- namese by 17th-century missionaries: The description of tones and the influence of Portuguese on Vietnamese orthography. *Histoire Épistémologie Langage*, 39(1), 155 – 176.
- Haudricourt, A.-G. (1949). L'origine des particularités de l'alphabet vietnamien. Dân Việt Nam, 3, 61-68.
- Hoàng, D. (2018). Chữ Quốc thực tiễn phát âm và lịch sử chữ viết. Proceedings of the International Conference on Linguistics in Vietnam. The path of international development and integration.
- Hoàng, P. (1961). Vấn đề cải tiến chữ quốc ngữ. 9-198.
- Hoàng, T. C. (1989). Tiếng Việt trên các miền đất nước: Phương ngữ học. Khoa học xã hội.
- Hoàng, Tiến. (1994). Chữ quốc ngữ và cuộc cách mạng chữ viết đầu thế kỷ XX. Lao động.
- Hoàng, Tụy. (1961). Vấn đề cải tiến chữ quốc ngữ. 331-336.
- Hoàng, X. V. (2007). Tìm hiểu lịch sử chữ Quốc ngữ. Văn hóa thông tin.
- Jacques, R. (1998). Le Portugal et la romanisation de la langue vietnamienne. Faut- il réécrire l'histoire ? Outre-Mers. Revue d'histoire, 85(318), 21-54. https://doi.org/10.3406/outre.1998.3600
- Jacques, R. (2007). Những người Bồ Đào Nha tiên phong trong lĩnh vực Việt Ngữ học. Khoa học Xã hội.
- Lê, N. T. (1959). Việt ngữ chánh tả tự vị. Thanh Tân.
- Lê, N. T. (1961). Chữ Quốc ngữ từ thế kỉ XVII đến cuối thế kỉ XIX. In Tuyển tập Ngôn ngữ văn hoá văn tự Việt Nam. Dòng Việt 1.
- Léopold, C. (1938). Iconographie du Père de Rhodes. Bulletin Des Amis Du Vieux Hué, XXV.
- Nguyễn, B. T. (1958). Ngôn ngữ học Việt Nam: Chữ và vần Việt khoa học. Ngôn ngữ.
- Nguyễn, K. K. (1993). Những công trình biên soạn từ tiếng Việt từ thế kỉ XVII. *Dòng Việt*, *1*, 51–68.
- Nguyễn, T. B. N. (1994a). Sự biến đổi các hình thức chữ quốc ngữ từ 1620 đến 1877 [Doctoral thesis]. Hanoi University of Education.
- Nguyễn, T. B. N. (1994b). Tìm hiểu sự thay đổi hình thức chữ viết từ Từ điển Việt - Bồ - La của

Alexandre de Rhodes đến Từ điển Việt La của Pigneau de Béhaine. *Journal Ngôn Ngữ*, 1.

- Nguyễn, T. G. (2016). Một số vấn đề về chữ Quốc ngữ. In *Chữ Quốc ngữ - Sự hình thành, phát triển và* đóng góp vào văn hóa Việt Nam. Đại học Quốc gia TP Hồ Chí Minh.
- Nguyễn, V. H. (2017). Trả lời chính thức của Viện Hàn Lâm Khoa học Xã hội Việt Nam về đề xuất cải cách chữ viết của ông Bùi Hiền. Viện Hàn Lâm Khoa học Xã hội Việt Nam.
- Poisson, E. (2004). Mandarins et subalternes au nord du Viêt Nam: Une bureaucratie à l'épreuve, 1820-1918. Maisonneuve et Larose.
- Rhodes, A. de. (1651). Từ điển Annam Lusitan Latin (Thanh Lãng, X. V. Hoàng, & Q. C. Đỗ, Trans.). Khoa học Xã hội.
- Saussure, F. de. (1959). *Course in General Linguistics*. Columbia University Press.
- Taberd, J.-L. (2004). Dictionarium Annamitico Latinum / Nam Việt Dương Hiệp tự vị. Văn học.
- Thanh, L. (1967). Bảng lược đồ văn học Việt Nam (quyển hạ). Trình bày.
- Theurel, J. S. (1877). *Dictionarium Annamiticum-Latinum*. Missionis Tunquini occidentalis.
- *Tiếng Việt sẽ có thêm 4 chữ cái*. (2011, August 10). ZingNews.vn. https://zingnews.vn/zingnews-post 123507. html
- Trần, N. (1984). Một bộ từ điển Việt La Tinh viết tay vào cuối thế kỷ XVIII vừa sưu tầm được. *Tạp chí* Nghiên cứu Hán Nôm, 127–136.
- Trần, V. T. (2004). *Chữ quốc ngữ và chữ nôm Tự vị Taberd và di sản văn hóa Việt Nam (bài 2).* http:// www.vietcatholicnews.net/News/Html/29718.htm
- Ủy ban Khoa học Nhà nước. (1961). Vấn đề cải tiến chữ quốc ngữ. Văn hóa.
- Văn Bảy. (2017). "Tiếng Việt cải tiến" của Bùi Hiền: Chữ Quốc ngữ thay đổi ra sao sau gần 400 năm. Báo Điện tử Thể Thao & Văn Hóa - TTXVN. https://thethaovanhoa.vn/van-hoa/lat-lai-su-thaydoi-cua-chu-quoc-ngu-qua-gan-400-namn20171204065019808.htm
- Zhu, Y. (2005). Written Communication across Cultures. In *Pbns.141*. John Benjamins Publishing Company. https://benjamins.com/catalog/pbns.141

TỪ ĐIỀN PIGNEAUE DE BÉHAINE VÀ JEAN-LOUIS TABERD NHƯ LÀ NỀN TẢNG CỦA CHỮ QUỐC NGỮ

Lê Nam^a, Nguyễn Văn Hiệp^b

^aNhà Nghiên cứu ở Paris, Pháp ^bViện ngôn ngữ học

Tóm tắt: Bài viết miêu tả hai cuốn từ điển của Pigneaue de Béhaine và Jean-Louis Taberd như là nền tảng cho chữ Quốc ngữ, thể hiện ở các giải pháp dùng các chữ cái Latin, kết hợp với một số dấu phụ (diacritics) để miêu tả các bộ phận của âm tiết (syllable) tiếng Việt. Bài báo cũng chỉ ra, phân tích nguyên nhân thành công và đóng góp to lớn của hai cuốn từ điển này.

Từ khóa: Từ điển Pigneaue de Béhaine và Jean-Louis Taberd; chữ Quốc ngữ; phụ âm đầu; vần; âm cuối; dấu phụ; giai đoạn Bồ Đào Nha.