The Magical Secret of Phonology

Linguistics is the science of language. Language science describes and analyses language phenomena in order to understand how language works. In England, Sir Isaac Newton described the phenomenon of gravity and the physics of movement with his laws of motion and gravitation. He did not invent these laws in 1687. He merely discovered and formulated a few of the natural regularities that operate in the universe, illuminating rules by which Mother Nature herself abides. Neither King James II nor an Act of Parliament could have changed these laws of physics, nor could they have repealed the force of gravity even if they had wanted to do so.

By the same token, each natural language has its own phonology. The phonology is a natural system within the living spoken language and is not a feature of the written language. A linguist can describe and accurately document the phonology of a language if he or she is up to the task, but a linguist cannot change the phonology of a language.

Today neither Queen Elizabeth II nor an Act of Parliament at Westminster can change the phonology of the English language, and the same holds true in Bhutan for the phonology of spoken Dzongkha. Thus not only the government, but even the native speakers themselves cannot change the phonology of their own mother tongue. The sound system of a language does not change over the course of history because of any conscious decision on the part of the speakers to change the phonology. Instead the phonology of a language evolves naturally over time in accordance with so-called sound laws.

Not all languages have a writing system, but each language has a phonology. We can either describe the sound system of a language accurately or we can fail to grasp its true nature, but we cannot tamper with the natural phonology of the spoken tongue.
The writing system of a language is an altogether different matter. We can change spellings at will. Englishmen write “colour”, “modernisation” and “tyre”, whereas Americans write “color”, “modernization” and “tire”. In Bhutan, the word for the national dress, pronounced གོ ལེང་, used to be written ཁོས gos and then at one point it was decided to change the spelling to གོ bgo, whereas the spelling of དོད་ sgo “door”, pronounced go, was not changed.

Many languages have a writing system that reflects the phonology of the spoken language accurately or almost perfectly. Such languages include Finnish, Thai, Dutch, Burmese, Russian, Italian and Nepali. Some of these phonological writing systems follow simple rules, for instance, Italian and Finnish. Some are a bit more complicated but are still essentially phonological, such as Burmese and Thai. The more simple and straightforward a writing system, the more sophisticated the spelling from the linguistic point of view, and hence the easier the spellings of words are to learn and master for native speakers of the language.

A phonological writing system represents the sound system of the living spoken language faithfully, but some languages have antiquated or arcane spelling systems which do not do a very good job of reflecting the phonological reality of the language. English and French belong to this category, and their spelling systems are notoriously difficult to learn, both for native speakers and for foreign learners. However, English and French manage to maintain their antiquated spelling systems because of cultural inertia and the global commercial interests mediated through these languages.

In contrast to globalised languages such as English and French, small languages with little economic clout run the risk of falling into disuse if their writing systems are too complex. In terms of spelling, Dzongkha is also a member of the same group as English and French. However, mastering the spelling of Dzongkha is an order of magnitude more difficult because, for historical reasons, no straightforward relationship exists between the Chöke-inspired spellings and the living phonology of modern spoken Dzongkha.

**A Historical Precedent**

Vietnamese makes an interesting case study, because from 111 BC until 939 AD Vietnam was governed as a Chinese province. For over a millennium, Chinese served as the written language in Vietnam, even though Chinese and Vietnamese are unrelated languages. Chinese belongs to the Trans-Himalayan language family, also known as Tibeto-Burman. Vietnamese belongs to the Austroasiatic family.
the 13th century, a few Vietnamese scribes began to write their own Vietnamese language using Chinese characters. This system of writing was called Chữ Nôm. In fact, we could use the very same Chữ Nôm system for English or for Dzongkha. We would then just write a character like 紅 and then pronounce this ideogram as red in English or as ṭmap in Dzongkha. It is not surprising that very few Vietnamese ever learnt to read or write using this Chinese-based ideogrammatic writing system.

Since the Vietnamese had no system of writing of their very own, the French Jesuit priest Alexandre de Rhodes invented a system of romanisation which in Vietnamese came to be known by the name Chữ Quốc ngữ, “national language script”. This spelling system first appeared in 1651 in Alexandre de Rhodes’ famous dictionary of Vietnamese, Portuguese and Latin. This first phonological Vietnamese writing system was initially used only by scholars, but at the beginning of the 20th century, an attempt was made to teach the spelling system in classrooms to ordinary Vietnamese.

Vietnamese spelling might strike outsiders as complex, but to a Vietnamese native speaker the system seems simple and intuitive. This is because all the spellings accurately and straightforwardly reflect the phonology of the living spoken language. When it was observed that people acquired this phonological spelling within just three weeks of systematic instruction, the French colonial government in 1910 made Chữ Quốc ngữ the official orthography of Vietnamese, and literacy skyrocketed in Vietnam for the first time in the country’s history.

Some phonological systems of writing, such as Vietnamese and Czech, look a bit complex, whereas others, such as Finnish and Italian, look rather simple. This is because the sound systems of Vietnamese and Czech are actually a little bit more complex than the phonologies of Finnish and Italian. For native speakers of each of these four languages, however, the spelling system of their native tongue is easy and intuitive. Vietnamese, Czech, Finnish and Italian children do not suffer as many learning difficulties when trying to master correct spellings as do English or French children. What the Vietnamese experiment in the first decade of the 20th century demonstrated was how quickly and easily an entire population could acquire a spelling system as long as the spelling was phonologically complete and consistent. This is the magic of phonology.

Some Specifics of the Bhutanese Situation

The Bhutanese situation is different from the Vietnamese situation. Unlike, Vietnam, Bhutan already has its own native system of alphabetic writing in the form of the བོད་ཡིག.
Many languages in Asia have their own alphabetic writing systems, in which the letters are used to represent speech sounds. Thai, Hindi, Khmer, Bengali, Malayalam and Burmese are just a few out of many such languages with their own native script and writing system. Some Asian languages once used to have their own script but later lost their native system of writing. Javanese is today written in Roman script, and Newar is written in the devanāgarī script that is also used for Nepali. The original Javanese and Newar scripts are now used only for ornamental purposes. Though this may be just a matter of personal taste, this development strikes me as a trifle sad. It is fine to use Roman script for Javanese or devanāgarī script for Newar as a learning aid or on traffic boards and street signs, but to my mind Javanese and Newar each look better in their own beautiful traditional native scripts.

Of course, Dzongkha could also be written in Roman script just like Vietnamese, but I doubt that people would ever want that to happen. Therefore, the system of phonological writing called Roman Dzongkha, which was developed by the Dzongkha Development Commission in the 1990s, was designed merely as an aid so that scholars could accurately represent modern Dzongkha phonology. Roman Dzongkha was intended to be used on road signs, on maps and in bilingual dictionaries, but Roman Dzongkha was never meant to replace the lovely traditional Uchen script, which is part of Bhutan’s precious cultural heritage.

Similarly, the Chinese government in 1957 adopted a phonological romanisation for Chinese called Hányǔ Pīnyīn, or just Pīnyīn for short. This Roman Chinese phonological writing system only came into popular usage in the 1970s. Today Roman Chinese or Hányǔ Pīnyīn has become the authoritative standard throughout the world for representing Mandarin pronunciation in the Roman script. Yet Pīnyīn will not replace Chinese writing. Roman Dzongkha serves the same purposes as Pīnyīn and will likewise not replace Bhutanese writing. Like Hányǔ Pīnyīn for Mandarin, Roman Dzongkha is a very useful tool for those learning the language and even an indispensable tool for foreign language learners not yet familiar with the phonology of spoken Dzongkha.

There is often a time lag between the first introduction of a phonological romanisation and its widespread adoption. In Vietnam, Chữ Quốc ngữ was introduced in 1651, but this spelling system was only adopted from 1910. In China, Hányǔ Pīnyīn was adopted in 1957 but only came into use in the 1970s. In Bhutan, the Dzongkha Development Commission introduced Roman Dzongkha in the 1990s, and already the system is sporadically used, especially as a tool or aid in scholarly sources, even though no formal training courses have ever been organised for the use of Roman Dzongkha.
Spelling Reforms and the Prospects of Modernisation

Languages change. Therefore, many languages update their spellings from time to time in order to reflect this change. Spanish, Dutch, Russian, Italian and German have periodically updated their spelling systems so that the writing system remains easy-to-use and intuitive for native speakers. By contrast, English and French learners have a much tougher time learning how to spell because their writing systems are neither consistent nor phonological. Even in English, people are increasingly tempted to use spellings such as *draft*, *jail* and *nite* instead of *draught*, *gaol* and *night*. French people today send text messages with popular new spellings such as *pkoi*, *biz* and *c* instead of the officially accepted spellings *pourquoi*, *bies* and *c’est*. At night, a text message from a friend in Paris today may wish you *bo rev* ‘sweet dreams’ instead of *beaux rêves*.

Even the Chöke or Classical Tibetan spelling was reformed in Tibet under King तृद्रिं डोन्सङ्त ऍ म ड न द ा सो णग री न स न ले ग ज ड ञ ज़ ‘Thride Songtsen, also known as उ द ज र न ज ख द न घ स द न ले ग ज ड ञ ज़ ‘Setnaelek Jing’yön, who ruled from 804 to 815. A second spelling reform was carried out in Chöke by ल ऱ ड न ज र न य ं ज ऩ ँ न ‘Lochen Rinchen Zangpo in the 11th century during the reign of ड न ल भ ‘Lha ‘Lama Yeshé Öt. After that, Chöke spelling became fossilised and came to be viewed as something sacrosanct and therefore unchangeable. The older spelling systems used for Chöke are referred to collectively as न द ए न ग ‘da’nying. Chöke spelling since the 11th century is called न द ए न ग न ‘dasar “new spelling”, except that this spelling is no longer new but in fact very old and rather difficult to learn.

The learning difficulties are exacerbated in the case of Dzongkha, because linguistically speaking Chöke and Dzongkha are technically different languages, just as French and Latin are different languages, even though French derives historically from Latin. Therefore, the use of Chöke spelling for modern spoken Dzongkha was challenged by Bhutanese scholars from the very outset.

In the 1970s, ब ड ब न ‘lōbō ‘Nādo and ब ड ब न ल ब ‘lōbō Pēmala both proposed various innovations to Dzongkha spelling. Almost all of these proposals were rejected, and they have since been forgotten. The Central Monk Body was strongly opposed to changes in the spelling because at the time people still mistakenly equated Dzongkha with Chöke in their minds. Of course, the Central Monk Body was entirely correct to insist that we cannot change the historical spelling of Chöke. However, the spelling of Dzongkha is another matter altogether. A number of spelling changes have already been introduced over the years by the Dzongkha Development Commission.
The problem with the changes in Dzongkha spelling up till now, however, is that these changes too have themselves been unsystematic in character. Even the change from གོས་ gos to བགོ་ bgo for the national dress g’ô was a haphazard change that renders Dzongkha spelling less systematic and more difficult to learn. In the first issue of the Druk Journal, I informed our readers that a straightforward and consistent phonological spelling system in 'Ucen script had been developed by the Dzongkha Development Commission just over twenty years ago but never formally introduced. The system is called Phonological Dzongkha, and this spelling system in traditional Bhutanese script is entirely distinct from Roman Dzongkha. Yet we decided to shelve the thoughtfully conceived and well designed proposal because none of us wanted to create an uproar.

Then in 1999, two new members of the Dzongkha Development Commission came to Kathmandu to attend the 5th Himalayan Languages Symposium. The new Commission colleagues asked me to return to Thimphu and campaign actively for Phonological Dzongkha. I told them that it was not the place of a foreigner to make decisions for the Bhutanese people. In fact, the system was developed together with older Bhutanese experts at the Commission, and I have no vested interest or personal preference. Moreover, I am happy not to be caught up in any fray, for the history of spelling reforms teaches us that quite often a number of people can work themselves up into an absolute froth about spelling. Quite understandably, some people prefer to stick with the old and familiar.

The Bhutanese people must and will decide for themselves. With the new robust multi-party democracy this holds even truer today. Meanwhile, complaints and laments about the difficulty of learning and spelling the national language have not ceased in the Bhutanese media.

Later this year or early next year, a new, expanded and enhanced edition of the Dzongkha grammar will be published. In the grammar, only the traditional and accepted spelling of Dzongkha is used. However, in a few appendices to the grammar, the easy systematic spelling system in 'Ucen script is explained to the public for the first time. By dusting off the cobwebs of Phonological Dzongkha, developed in Thimphu in the 1990s, no new orthography is being foisted upon anyone. Showing to the public at large what a genuine phonological spelling of the national language looks like simply gives the Bhutanese people the option of considering such a spelling in the native Bhutanese script for the first time.

The phonology of a spoken living language is a natural phenomenon which exhibits
its own regularities. We can describe and represent the modern sound system accurately, or we can choose to continue with the old spellings which tax the memory and remain arduous to learn and difficult to master. Because of the magic of phonology, Phonological Dzongkha feels intuitive and is naturally easier to use for a native speaker of Dzongkha from western Bhutan than for native speakers of Tshangla, Dzala or English. On the other hand, Phonological Dzongkha can help native speakers of Tshangla, Dzala or English to develop better pronunciation habits in the national language.

The few native speakers of Dzongkha who have already been exposed to Phonological Dzongkha find the system so intuitive and easy to use that they find it hard to go back to the traditional spelling. These lucky test pilots of the phonological spelling spontaneously began to send text messages and emails in Phonological Dzongkha. If complicated spelling makes sending emails and text messages in 'Ucen script so difficult that the national language falls into disuse because people opt instead to use English in their personal correspondence, then a modernised Dzongkha spelling could serve to preserve cultural heritage and stimulate the use of the national language in the new media. Modernisation can be harnessed to serve and ensure cultural preservation.